



Problem of Malnutrition of Elderly People Living at Home in the District of Coleah (Commune of Matam)

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Abstract

In Guinea, there is no data on the prevalence of un denutrition among elderly people living at home.

The objective of this study was to determine the prevalence of under nutrition among the elderly and to contribute to the improvement of their diet.

The results of this study show that a significant proportion of elderly people living at home have an altered nutritional status.

The most affected were the male and those who lost their partners (widows and widowers).

Indeed, out of a total of 103 people surveyed in the Coleah district from 8 to 18 June 2018, we obtained the following results: According to the overall assessment of malnutrition, we found the following: One person (ie 0.97%) out of the 103 respondents was severely malnourished, 19 (18.45%) were at risk of undnutrution and 83 (80.58%) were in normal nutritional status. According to BMI, 8 out of 103 were underweight, 25 were overweight, 23 were obese and 7 had normal nutritional status.

Keywords: Undemutrition; Elderly; Home

Introduction

"The seeds of healthy ageing are being sown; early" (Kofi A. (a).

Ageing is a universal, continuous and irreversible phenomenon that does not constitute a pathology.

However, the ageing process leads to a decrease in physical reserves, physiological changes, alteration of the senses, a decrease in mental and cognitive capacities as well as social changes. If these changes are not pathological in nature, they result in a state of fragility and vulnerability conducive to the onset of diseases, infections and nutritional disorders (undernutrition).

Malnutrition or undernutrition is the most common nutritional disorder in the elderly. It develops when the individual's dietary intake no longer compensates for his nutritional needs.

Undernutrition of the elderly is a problem that does not only affect developing countries, as some would think; It also affects the population of developed countries suffering from acute or chronic diseases, namely individuals in precarious economic situations, children as well as adults.

It is more common in health facilities where the most malnourished patients are observed. It varies, depending on the type of pathologies treated and the length of hospital stay. Hospitalization longer than one week is significantly associated with weight loss [21].

Nowadays, it is scientifically proven that diet and nutritional status have a significant impact on health. Recent studies have shown that undernutrition is associated with increased morbidity and even mortality in some age groups.

Epidemiological data available in Europe and France show that undernutrition affects a significant part of the population, particularly dependent elderly people and those suffering from chronic diseasesz

All people, regardless of their age, can be victims, and have different degrees of malnutrition depending on the causal factor.

A particularity is put on the prevalence of undernutrition of the elderly which is more important, which can reach 50 to 60% in some studies.

In 2009, a survey conducted by the French Food Safety Agency (AFSSA) showed that 4 to 10% of elderly people living at home and 30 to 90% of the elderly population hospitalized or institutionalized were malnourished. These figures highlight the close link between dependency and undernutrition: the more dependent older people are, the greater the risk of undernutrition. Thus, if we compare the data obtained by different studies on the undernutrition of the elderly, we can observe this deterioration in the risk of undernutrition according to the life situation and the level of dependence.

Even FERRY, *et al.* found in an adult institution, a prevalence that varies from 19 to 60% [22] At the hospital level, the risks are even greater, according to public studies, 20 to 50% of hospitalized patients are malnourished or at risk of malnutrition [10]. The High Authority for Health estimates it at around 50% in the elderly [11].

A national survey conducted in 25 Brazilian hospitals in 2001 on 4000 randomly selected patients reveals that the prevalence of global undernutrition is 48. 1% with 12. 6% severe undernutrition [27].

According to the North American scientific literature, including Ontario and data on research, reports that the prevalence of protein-energy undernutrition (ECD) is in the order of

- 3 to 7% of the elderly population living in communities
- 5% to 12% of clients who receive home-support services;
- 35-65% of seniors admitted to hospital for acute care; and
- 25-60% of patients living in institutional long-term care settings

Materials and Methods

Study area and sampling stations

Description of the study environment

President of the City of Conakry

Conakry is the capital of the Republic of Guinea, located on the Atlantic Ocean. In 2015, the agglomération had more than 3 million inhabitants, making it the largest city in the country.

Located in the south-west of Guinea, the agglomération of Conakry extends over the coastal plain crossed by small rivers that de-

scend from the Fouta-Djalón. The territory of the city is oriented to the northeast/southwest and ends with the peninsula of Kaloum and the island of Tombo.

Its historical center is located on the island of Tombo, but urbanization has long since spread to the mainland, especially on the peninsula of Kaloum to which it is connected by a

Conakry is handicapped by urbanization and housing problems that the Guinean government has decided to address by launching the Grand Conakry Vision 2040 program to redevelop the city to Kindia.

Conakry enjoys a tropical climate. The dry season is under the influence of harmattan from December to April. The rainy season is intense and reminiscent of the monsoon.

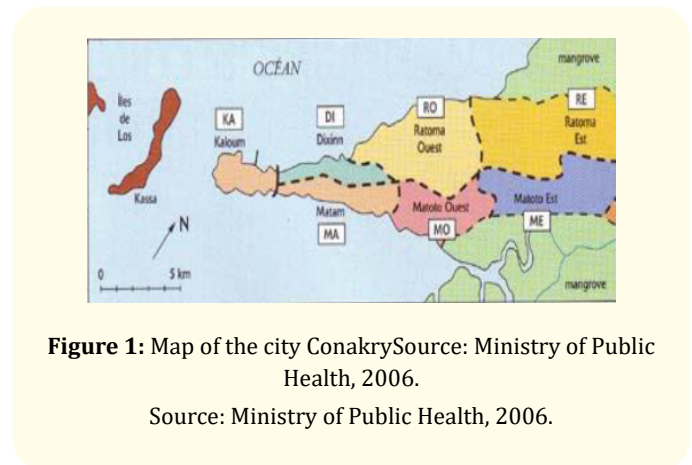


Figure 1: Map of the city ConakrySource: Ministry of Public Health, 2006.

Source: Ministry of Public Health, 2006.

Presentation of the commune of Matam

- The commune of Matam is one of the 5 communes of the Guinean capital (Conakry), it was created in 1991.
- The municipality of Matam is on 8km and has 24 districts or 103 sectors.
- It has a total population of 141. 763 inhabitants including 71,186 women for 19. 668 households.

It is limited to

- To the EST by the municipality of MAOTO
- TO the WEST by the commune of KALOUM
- NORTH by the communes of DIXINN AND RATOMA
- SOUTH by the OCEANT A TLANTIQUE

Presentation of the Coleah Domino district

The Quartier Coleah Domino is one of the 24 districts of the commune of Matam. Domino has a population of 2495 inhabitants for 1269 women with 316 households.

It is limiting

- To the EAST by Coleah printing
- A l'OUES T by Coleah Lancebougni
- At NORD by Cameroon and Karnayen
- SOUTH by the Atlantic Ocean

Materials And Methods

Selection criteria

- All persons aged 60 and over

Criteria for inclusionion

- All persons aged 60 and over who would be at our study

Criterion of non inclusion

- All persons outside the survey area
- Anyone under the age of 60
- Anyone aged 60 and over, but not preparing for our study

Sampling

Size and technique of sampling

- To select our sample, we made appe l at an echantillonage probabil iste
- By the technique of non-systemic random escape.
- As regards the selection of persons to be entered into our work, we have proceeded by means of the non-probabilistic method of equestril. onvenance. That is to say once the place has been chosen, all people aged 60 and over are concerned by our study, they amounted to 103 percent.

Materials used

The following materials were used to carry out this work

Anthropometric material

Une toise To measure the taila MUC to determine the mid-upper hand circumference

Ascale-weighed e-adult, to take the weight

Teaching materials

- Fiches of investigation
- Computer
- Bic
- Pencil

Data collection technique

Techniques

We used the following techniques

- The technique of direct observation using our observation grid examined us ourselves in order to emerge equalled the necessary parameters.

Conduct of the investigation

- Identification of the elderly (i d e ntité parti e ll e)
- Sampling of the mid-arm circumference (Measurement mid-distance between the acromion and
- The olécran with a muac, of prelevé to the left arm)
- Calculation of BMI, to determine the stage of denutrition
- Overall evaluation of the screening score to determine the final status. c- Data collection schedule

Data Collection Schedule

We have carried out a field screw over the course of five (5) months, (i.e. fourtimes a month). We worked from 9 a.m. to 4p.m.

Data processing and analysis

Data processing and analysis were done using the following languages: Excel 2007 and Word 2007.

Results And Discussions

The analysis of this table shows us that out of 103 people surveyed, eight (8) people or (7.7%) are undernourished. This confirms North American scientific literature, including Ontario and Quebec data.

This table shows that the genus masculin is much more affected by undernutrition, i.e. 6 out of 8 people.

The results of this table reveal that the age group most affected by undernutrition is 60-70 years.

This table shows that those who practise liberal are the most affected by malnutrition. This could be explained by the fact that these people did not have a source of revenue.

In this table, we observe that out of a total of 8 persons denutr, 5 persons (62.50%) are not married. These results confirm the investigation conducted by the French Food Safety Agency (AFSSA) in 2009 [25].

The results of this table allow us to conclude that those who eat less are much more affected by undernutrition; With the following proportions: 4 out of 8 people who consume 1 meal a day (50%) are deprived, 3 out of 8 people who consume 2 meals a day and one in 8 malnourished people consume three meals a day. We can relate the frequency of meals to the various health problems these people face (anore xie, oral problems. . .).

The results of this table highlight the close link between dependency and deprivation.

The analysis of this table shows that 50% of the 8 people identified as destitutehave an arm circumference of less than 2 J cm.

The analysis of this table shows that the number of women is higher than that of men respectively 65 women (63.11%) and 38 (36.89%). According to a study carried out in the United States in April 2012 by the Institute of Health Metrology and Evaluation and published by the Huffington Post, men have a higher life expectancy compared to women.

Between 60-70 and 71-80 years are the most represented in our study with a percentage of 58.25%.

This table shows us that the female sex is the most represented in these age groups with the respective percentages of 37.86 and 20.39%.

Of the 103 people surveyed, 13 people or 12.62% said no for fruit consumption and gum.

From this table, it follows that 24 out of 103 people took more than three medicines per day.

This table allows us to conclude that there are a significant number of seniors who are facing a problem of anorexia. Out of 103 people surveyed, 45 people or 43.69% have anorexia moderated.

3 people out of 103 (i.e. 2.91%) of the people surveyed lost more than 3Kg, 16 people lost between 1 and 3Kg, on the other hand, 14 people do not know and More of the population i on studied has not lost weight s.

Etat nutritional	Number	Percentage
Denutrition	8	7,77%
Normal	47	45,63%
Obese	23	23,33%
Overweight	25	24,27%
Total	103	100,00%

Table 1: Number of undernourished people.

Sex	Number	Percentage
Wives	2	25,00%
Men	6	75,00%
Total	8	100,00%

Table 2: Distribution of undernourished people by sex.

Age range	Number	Percentage
60-70 years	4	50,00%
71-80 years	3	37,50%
>90 years	1	12,50%
Total	8	100,00%

Table 3: Distribution of malnourished seniors by age.

Profession	Number	Percentage
Official	1	12,50%
Housewife	2	25,00%
Professional	3	37,50%
Retreats	2	25,00%
Total	8	100,00%

Table 4: Distribution of malnourished persons by occupation.

Marital status	Number	Percentage
Widows/Widowers	5	62,50%
Marry	3	37,50%
Total	8	100,00%

Table 5: Distribution of malnourished by marital status.

Number of meals	Number	Percentage
1 meal	4	50,00%
2 meals	3	37,50%
3 meals	1	12,50%
Total	8	100,00%

Table 6: Distribution of undernutrition by number of meals.

Motivity	Number	Percentage
Autonomous inside	1	12,50%
Leaving the home	1	12,50%
From bed to armchair	6	75,00%
Total	8	100,00%

Table 7: Distribution of undernutrition by motor skills.

BC values	Number	Percentage
CB > 22	1	12,50%
21 < C < 22	3	37,50%
CB < 21	4	50,00%
Total	8	100,00%

Table 8: Distribution of undernutrition by arm circumference.

Gender	Number	Percentage
Wives	65	63,11%
Men	38	36,89%
Total	103	100,00%

Table 9: Distribution of the total sample by sex.

Age and gender ranges 60-70	Number	Percentage 58,25
Wives		37,8
Men	2	20,3
71-80	2	20,39
Wives		14,5
Men	6	5,8
81-90	16	15,53
Wives	8	7,7
Men	8	7,7
>90	6	5,83
Wives	3	2,91
Men	3	2,91
Total	103	100,00%

Table 10: Age and Sex Distribution of the Sample.

Parameter	Number	Percentage
Not	13	12,62%
Yes	90	87,38%
Total	103	100,00%

Table 11: Sample Distribution by Fruit and Vegetable Consumption.

Parameter	Number	Percentage
Yes	24	23,30%
Not	79	76,70%
Total	103	100,00%

Table 12: Distribution of the sample by medication intake.

Anorexia	Number	Percentage
Moderate anorexia	45	43,69%
No anorexia	58	56,31%
Total	103	100,00%

Table 13: Sample Distribution by Anorexia.

Recent weight loss	Number	Percentage
Don't know	14	13,59%
Between 1 and 3 kg	16	15,53%
No weight loss	70	67,96M
>3kg	3	2,91%
Total	103	100,00%

Table 14: Sample Distribution by Recent Weight Loss.

Conclusion and Recommendations

Undernutrition is currently a major contributor to morbidity and mortality is a major problem among older people in developing and developing countries.

Recognized since the 70s, as a public health problem in some developed countries, undernutrition of the elderly must be prevented, diagnosed and managed correctly.

Unfortunately, a similar observation emerges in this regard; It often goes unnoticed, seems unknown in several countries, both developed and undeveloped.

Noting the consequences of this nutritional problem on the elderly, several European countries have laid off concrete measures in their national policies to prevent, detect and manage it at community level, in nursing homes, but also in the community.

Having noticed the absence of the statics of undernutrition in Conakry, in the literature within our reach, we decided to conduct this study, to try to answer the following questions

- What is the prevalence of undernutrition of the elderly living at home in the neighborhood of Coleah?
- Who are the people best affected by this malnutrition?
- This study aimed to highlight the prevalence of undernutrition and contribute in the long term to its reduction, while improving the diet of those affected.
- To achieve this objective, we opted for a quantitative observational epidemiological study and the cross-sectional descriptive method.
- For this purpose, we used direct observation and literature review to collect our data on a sample of 8 malnourished out of a total of 103 elderly people, obtained by non-systematic random probability sampling and non-probability sampling of convenience. for the selection of malnourished.

Using the following diagnostic tools: Global assessment of malnutrition mid-upper arm circumference, BMI; We obtained the following

- Nutritional status according to the overall assessment of malnutrition: 21.3-6% of the elderly surveyed were at risk of malnutrition, 77.67% of them were in a normal nutritional status and 0.97% were severely malnourished.
- Based on BMI, 7.77% were in a state of denutrition, 45.63% were normal; But it should also be noted that there are a significant number of elderly people who are in a state of overweight and obesity. The percentages we found for overweight and obesity are 24.27% and 22.33% respectively.

The sex most affected by undernutrition and male. In view of these results, we suggest the following.

To the health authorities of the country of the capital Conakry, the administrative regions of the prefectures and sub-prefectures.

- Pay more attention to undernutrition in the elderly by making clear recommendations on prevention, screening and management; in a formal way
- To the authorities of each hospital concerned by our
- To the authorities of each hospital concerned by our study
- To develop "a tool" that must be reliable, valid and reproducible in terms of screening for undernutrition of the age;
- To use the most qualified personnel in human nutrition;
- To set up food-nutrition liaison committees for the management of undernourished people ;
- To provide their structure, materials for the screening of undernutrition;

To healthcare professionals

- Admission in your services the anthropometric parameters (weight, size) in order to detect even a loss of weight;
- To refer any patient at risk of malnutrition or already malnourished to the nutritionniste for appropriate nutritional management.

Future researchers to

- Determine the prevalence of undernutrition of the elderly in hospitals in Conakry.
- Determine and analyse the factors involved in the occurrence of undernutrition of the elderly in hospitals in Conakry.

Bibliography

1. Agence Nationale d'Accréditation et d'Evaluation en Santé "ANAES". "Diagnostic evaluation of protein-energy malnutrition in hospitalized adults, Service des recommandations professionnelles (2003): 122.
2. Ancelle T. "Statistique épidémiologie". éd maloine, paris (2002): 97-123.
3. ANDRE VAN GOSSUM., *et al.* "Undernutrition in hospitals, health Public of medical but also economic issues (Brussels)" 3 (2007): PL-6.
4. Avignon A., *et al.* "Cahiers de nutrition et diététique". Edition Masson (2001): 163.
5. BASDEKIS JC., *et al.* "L'alimentation des personnes âgées et la prévention de la dénutrition". ed estem, Paris (2004): 41.
6. Beau P. "Prevalence of undernutrition in hospitalized patients". In: Leverve X, Cosnes J, Erny P, Hasselmann M, ed. Deals with artificial nutrition of the adulte. Bet: ed. Mariette Guena, Societe Francophone de Nutrition Enterale et Parenterale (1998): 639-645.
7. GARNIER M., *et al.* "Dictionnaire des termes de médecine, 26th edition, Ma1oine, pans (2000): 216.
8. Gin H., *et al.* "The risk of malnutrition and malnutrition in the hospital: survey a given day". *Cahiers de Nutrition et de Diététique* 36.3 (2001): 185-188.
9. Guigoz Y and Vellas B. "Test to assess the nutritional status of the elderly person: the Mini Nutritional Assessment (MNA)". *Medicine and Hygiene* (1995): 965-969.
10. "High Committee for Public Health. For a nutritional policy in France". ENSP Editions (2000).
11. High Health Authority. "Strategy for the management of protein-energy malnutrition in the elderly" (2007).
12. Heymsfield SB., *et al.* "Nutritional assessment by clinical and biochemical methods". In: Modem nutrition in health and disease. Philadelphia: Lea and Fibiger (1988): 817-860.
13. Institut National de la Sante et de la Recherche Medical erl. Nutritional deficiencies. Etiol ogies and screening. Paris: INSERM, Collection Expertise Collective (1999).
14. Salaun F. "Welcoming and caring: AP-HP, 150 years of history. Paris, Dion-AP-HP (1999): 274.
15. Therond P. "Evaluation de l'état nutrition, In Societe Francaise de Biologie Clinique, et al, Cahier de formation biochimie. Assurance qualite. Tome II. Edition SFBC; Paris (1994): 205-208.
16. Tucker and Miguel. "Cited by Agence nationale de l'accréditation et d'évaluation de sante ANAES: Diagnostic evaluation of protein-energy malnutrition in adults ospitalises (2003).
17. Basdevant A., *et al.* "Deals with clinical nutrition of adults". Paris: Flam. marion medicine sciences (2001).
18. Bonarek M., *et al.* "Relationship between cholesterol, apolipoprotein E polymorphysm and dementia: A cross-sectional analysis from the PAQIBD study". *Neuroepidemiology* 19 (2000): 141-148.

19. Ministry of Public Health and Health Directorate of the City of Conakry (DSVCO). "Survey on the provision of care in the city of Conakry". Informal sector. Conakry: MSP and National Directorate of Prevention and Community Health (DNPSC) (2006).
20. Mowe W., *et al.* "Reduced nutritional status in an elderly population (>70 y) is probable before disease and possibly contributes to the development of the disease". *The American Journal of Clinical Nutrition* 59 (1994): 317-312.
21. Sullivan DH., *et al.* "Impact of nutrition status on morbidity and mortality in a select population of geriatric rehabilitation patients". *The American Journal of Clinical Nutrition* 51 (1990): 749-758.
22. Symbolic and (TCAI) eating disorder in institutions: refusal Food: Conference, forum of the Food and Nutrition Liaison Committee (CLAN) "Care on my plate" (2006).
23. De Groot LC., *et al.* "SENECA Investigators. Lifestyle, nutritional status, health, and mortality in elderly people across Europe: a review of the longitudinal results of the SENECA study". *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences* 59 (2004): 277-284.
24. Ferry M., *et al.* "Study of food consumption among older people in the EURONUT-SENECA survey. In methodological approaches to food consumption surveys in humans". *IFN Scientific Dossier*.
25. Consensus Conference on the care of people aged 75 and over in emergency rooms, Strasbourg (2003).
26. Afssa. "The French Food Safety Agency relating to the critical analysis of the results of a toxicity study on the development of the nervous system as well as other recently published data on the toxic effects of bisphenol A" (2009).
27. M Isabel., *et al.* "Risk factors for malnutrition in patients undergoing gastroenterological and hernia surgery: an analysis of 374 patients". *Nutricion Hospitalaria* (2001).