

Assessment the Interests of Elderly People Residing in Nursing Homes in Individual Activities

Massomeh Rasoulzadeh,¹ Mina Sadat Mirshoja,^{1,*} Mohammad Amouzadeh Khalili,¹ Mona Simin Qhualam,¹ Alliakbar Pahlavanian,¹ and Mehdi Rezaee²

¹Neuromuscular Rehabilitation Research Center, Semnan University of Medical Sciences, Semnan, IR Iran

²Occupational Therapy Department, Shahid Beheshti Medical University, Tehran, IR Iran

*Corresponding author: Mina Sadat Mirshoja, Neuromuscular Rehabilitation Research Center, Semnan University of Medical Sciences, Semnan, IR Iran. Tel: +98-23 33654180, E-mail: mejrh@semums.ac.ir

Received 2015 July 13; Revised 2015 September 15; Accepted 2015 October 15.

Abstract

Background: Aging is a process that happens over the course of human development in the last stage of life, the elderly have individual needs and interests which have been unknown due to differences between generations and lack of knowledge to them.

Objectives: The aim of this study was to identify the interests of the elderly in the domain of individual activities to be used by institutions and organizations for planning.

Patients and Methods: In this descriptive-analytical study, 80 elderly people in the age group 65 to 85 years residing in eight nursing homes in Tehran, Iran and affiliated with the Welfare Organization were studied. Their interest in three domains of individual activities daily activities, cultural educational affairs, and physical exercises were measured using a questionnaire and Interest Check List taken from Matsutessiu's and Klyczek et al.'s studies. To analyze the data, the frequency percentage, the Chi-square test, and the Fisher test were used with a significance level of 5% as determined via SPSS-18. Moreover, to evaluate the statistical validity of data, cluster analysis was used.

Results: Investigation of the elderly people's interests in three domains of individual activities showed the greatest interest in the activities of daily living; elderly of both sexes were interested in putting on makeup up appearance dressing up, going shopping, and dust, while the women were interested in cooking (over 80%). Meanwhile significant difference was seen in the women's and men's interest in driving, cooking, and washing ($P = 0.05$). In terms of cultural-educational pursuits, both sexes were interested in scientific and religious studies, praying, and listening to lectures. However, men were more interested in historical studies and concert (over 80%). Moreover, a significant difference between the two genders was evident in terms of writing and math calculations ($P < 0.05$). Both sexes were interested in physical exercise, such as hiking and fitness. A significant difference between the two genders was observed in relation to activities like playing football, swimming, traditional sports, cycling, volleyball, tennis, and basketball ($P > 0.001$).

Conclusions: The results showed that in the domain of individual activities in both sexes, the rates of interest in daily activities, cultural-educational pursuits, and physical exercise were very similar. However, in some cases, there were differences between the two sexes in terms of their interest in specific activities.

Keywords: Aging, Individual Interests, Physical Exercise, Cultural and Educational Affairs, Daily Activities

1. Background

Throughout the world and in Iran in particular, an aging population has been observed. Based on the census (Iran, 2006), 7.3% of the total population were elderly (1, 2). Thus, it is necessary to pay special attention to planning health care and individual activities for the elderly (3, 4). Such individual activities include personal aspects, activities of daily life, self-care, occupation, and hobbies; tend to be affected by disorders which may be experienced by elderly people. These disorders often restrict their activities and ultimately have an inappropriate effect on their daily life (3, 5). Maintaining the health of the elderly requires the attention to their health throughout their lifespan, support of lifestyle changes that arise via a variety of occupational, cultural, social, and rehabilitation factors, and an appro-

appropriate environment (6, 7). In recent years, the provision of facilities including charities and pensions centers, etc. for the elderly in normal circumstances has been considered (8, 9), because stimulation of individual activities such as cultural and sport activities will allow the creative impulse to flourish (10, 11). This, in turn, will improve the emotional functions of elderly people and serve to maintain their health (12, 13). One of various studies conducted concerning the activities of the elderly is that of Wikstrom (2006) (14). This study, involved a comparison between amusing and educational activities in a control group and 147 patients with appropriately managed rheumatoid arthritis at the ages of 16 to 75 years (14, 15). Another study was conducted by Katez (14, 15) using Matsutessiu interest check list (1969)

in an attempt to identify the interests of the study group in five domains; the sample included 28 males and 36 females aged 18 - 60 years. Klyczek et al (1997) (6) also used Matsutessiu's Interest check list in a study that included 367 retirees in three age groups; these researchers considered five domains, including daily life activities, entertainment, social, educational and cultural affairs, sports and crafts, and determined the interests of the groups of participants (6, 7). In addition, in a study conducted on 83 elderly people, Hiemstra (1982) demonstrated their interests in the domains of art, music, and crafts (16).

2. Objectives

Due to the rapid social and cultural changes occurring at present, the increased longevity of the population, the growing number of elderly people, and the lack of sufficient knowledge about the interests of the elderly, especially in Iran, a study needs to be performed on elderly people and their activities. The purpose of this study is to determine the interests of the elderly in the domain of the individual activities. The results of this study may provide sufficient information for authorities, program coordinators, and administrators working with elderly people to provide better services and comprehensive planning. In addition, the time, energy, and costs of such planning will be reduced.

3. Patients and Materials

This is a descriptive-analytical study and the population includes all elderly Muslim people residing in nursing homes within the age range of 85 - 65 years in Tehran. By reviewing their medical records, it appeared that they were physically healthy and were reasonably mentally alert. Patients with age-related diseases, such as high blood pressure, high blood sugar, diabetes, and arthritis, were included in the study. The exclusion criteria for the subjects comprised belonging to religious minorities and having mental or physical limitations mentioned in the medical records. With permission from the ethics committee of the university of welfare and rehabilitation sciences, sampling was performed on eight elderly nursing homes identified by the welfare organization in Tehran. To acquire the permits to visit the centers. The selected institutions were located in the north, south, east, west, and central areas of Tehran. A total of 83 cases, 80 elderly people including 52 females and 28 males were selected as the appropriate sample.

3.1. Methods

Data collection was carried out in two ways, as described below.

3.1.1. Questionnaires

The questionnaire comprised (a) questions on demographic information and (b) an interest checklist taken

from Matsutessiu's Interest Check List and Klyczek et al. (1997) (6). First, the checklist was translated into Persian; then, some choices were checked and inserted according to the culture distractions of Iran. After confirmation by university faculty, removal of any distractions through a pilot study, and checking validity and reliability, the finalized questionnaire was used. The reliability and validity of the questionnaire already published in the literature were confirmed using the cluster analysis test (17). The interest checklist considered three levels of activities, as follows: activities of daily life (11 items), cultural-educational pursuits (13 items), and physical exercises (12 items). See Tables 1, 2, and 3 for details.

3.1.2. Interviews

To reduce bias in interpreting the checklist, the researcher completed the questionnaire on behalf of the participants through interviews. Then, written permissions were issued by the ethics committee at the university of welfare sciences and Tehran welfare organization to visit the affiliated nursing homes. To uphold the dignity of the elderly, the aims of research were explained to participants, and then signed consent was obtained with the approval of the responsible officials or guardians. The researcher emphasizes that personal information would be kept confidentially. After all of these steps were completed, the interviews were conducted.

3.2. Statistical Analysis

To analyze the data related to the items of interest in daily activities and cultural-educational pursuit through separation using a rating scales (I am interested in this, It does not matter to me, I am not interested in this) based on the frequency percentage. In addition, the statistical analysis was carried out using the Chi-square test and Fisher test using SPSS-18.0 with a significance level of 5%. To ensure the homogeneity, validity, and reliability of the data, cluster analysis was used; with this method, the data in each group were measured considering the homogeneity criteria for items at each level and the interest assessment criteria, which confirmed the findings of the study.

4. Results

This study was conducted via interviews with 80 elderly people residing in nursing homes in Tehran using Matsutessiu's Interest Check List. By studying the demographic information, the participants were aged 75 ± 3 years, and comprised 68% females and 32% males. Of the participants, 70% were widows/widowers, 10% were married, and 10% were single. In addition, 32.5% with 1 to 2 children, but over 7 children; 36.25% were illiterate and 13.75% had completed academic studies.

The results in the domain of individual activities were divided into three items, namely daily activities of life, cultural-educational pursuits, and physical activities, and they could generally be separated by sex. In terms of daily

activities, both sexes showed the most interest in Putting on makeup and dressing up. They also expressed interest in going shopping and dusting, but women also tended to like cooking, while this was not observed in men. In this study, the lowest interest was seen in women in terms of driving, while men expressed the least interest in laundry. Significant differences were observed between the two genders in terms of driving ($P = 0.013$), cooking ($P < 0.001$), and laundry ($P = 0.041$). The interest of men in driving was greater than that of women, while far more women were interested in cooking and laundry than men. In other cases, significant differences were not seen (Table 1).

Most cultural-educational interest of both sexes had to do with religious studies and prayer. In addition, interest in scientific studies, going to lectures, and attending concerts was also expressed. The lowest amount of interest re-

lated to the study of mathematics and political studies, and there was not a significant difference between men and women. There were significant differences among the sexes in terms of prayer ($P < 0.034$), math calculations ($P < 0.017$), and religious studies ($P < 0.001$). In the other cases, a significant difference was not observed (Table 2).

Men and women both expressed interest in physical exercise, mainly comprising hiking and fitness. Men were eager to swim. The least interest was observed in women to play basketball and tennis. Men tended to have the lowest interest in playing ping pong. A significant difference between genders in terms of interest in playing football, swimming, traditional sports, cycling, and basketball ($P < 0.001$). Men exhibited high interest in jogging, mountain climbing ($P < 0.004$), volleyball ($P < 0.016$), and table tennis ($P < 0.024$; Table 3).

Table 1. Distribution of the Interests of Elderly People Residing in Nursing Homes in Daily Activities According to Sex^a

Interest	Female (n = 52)	Male (n = 28)	P-Value
Repairing home appliances	27 (51.9)	14 (50)	0.870
Ironing	32 (61.5)	19 (67.9)	0.575
Home repair	21 (40.4)	12 (42.9)	0.830
Driving	15 (28.8)	16 (57.1)	0.013
Dusting	42 (80.8)	23 (82.1)	0.881
Cleaning the floor	28 (53.8)	17 (60.7)	0.555
Cooking	50 (96.2)	15 (53.6)	< 0.001
Going shopping	45 (86.5)	25 (89.3)	0.723
Washing clothes	31 (59.6)	10 (35.6)	0.041
Putting on makeup	51 (98.1)	28 (100)	1.00
Dressing up	51 (98.1)	27 (96.4)	1.00

^aData are presented as No. (%).

Table 2. Distribution of the Interests of Elderly People Residing in Nursing Homes in Cultural-Educational Pursuits According to Sex^a

Interest	Female (n = 52)	Male (n = 28)	P Value
Listening lectures	41 (78.8)	24 (85.7)	0.453
Writing	19 (36.5)	20 (71.4)	0.003
Scientific studies	43 (82.7)	25 (89.3)	0.431
Reading books and magazines	28 (53.8)	19 (67.9)	0.225
Social studies	27 (51.9)	18 (64.3)	0.288
Listening to classical music	34 (65.4)	19 (67.9)	0.823
Saying prayers	50 (96.2)	23 (82.1)	0.034
Art studies	24 (46.2)	17 (60.7)	0.214
Concerts	34 (65.4)	23 (82.1)	0.114
Political studies	12 (23.1)	12 (42.9)	0.066
Mathematics	8 (15.4)	11 (39.3)	0.017
Religious studies	51 (98.1)	21 (75)	0.001
Historical studies	27 (51.9)	20 (71.4)	0.091

^aData are presented as No. (%).

Table 3. Distribution of the interests of Elderly People Residing in Nursing Homes in Physical Exercise According to Sex^a

Interest	Female (n = 52)	Male (n = 28)	P Value
Hiking	47 (90.4)	26 (92.9)	0.709
Football	9 (17.3)	17 (60.7)	< 0.001
Swimming	15 (28.8)	23 (82.1)	> 0.001
Traditional sports	10 (19.2)	19 (67.9)	> 0.001
Jogging	16 (30.8)	18 (64.3)	0.004
Cycling	12 (23.1)	18 (64.3)	> 0.001
Exercise and fitness	41 (78.8)	21 (75)	0.694
Volleyball	17 (32.7)	17 (60.7)	0.016
Mountain climbing	10 (19.2)	14 (50)	0.004
Tennis	6 (11.5)	9 (32.1)	0.024
Basketball	6 (11.5)	12 (42.9)	> 0.001
Ping pong	10 (19.2)	7 (25)	0.547

^aData are presented as No. (%).

5. Discussion

In this study, three domains of the individual activities were investigated, namely activities of daily life, cultural-educational pursuits, and physical activities. The results showed the interest of the elderly in various fields within the individual activities; most interest among elderly people of both sexes was expressed in making up appearance. There was interest shopping and dusting. Women also tended to cook more than men but cooking it was less than in men. The statistical results of this study are in accordance with the research of Klyczek et al. (1997) (6).

During the interviews, it was determined that due to reduced physical capability and fear of damage and theft investigation, they paid less attention to their appearance and went out shopping less frequently (18, 19). Their unwillingness to leave home negatively affected the development of social relations among the interviewees (13, 20). In this study, the activity that gained the lowest interest in women was driving cars, while the least attractive activity for men was doing laundry (Table 1).

Other items included ironing and cleaning the floor, which were seen in both sexes. In some cases, they expressed that their unwillingness was due to decreased physical ability to stand or sit desire and abilities, even healthy elderly are faced with problems in doing one or more tasks in their daily activities, such as ironing, washing clothes, and repairs (21, 22). Weening et al. (2011) and Tan et al. (2015) also suggested that the lack of interest in the elderly in carrying out the daily activities is due to inability and a lack of energy (23, 24).

Most interest in cultural-educational pursuits was directed toward religious text reading and prayer; however, while the difference was small, the order of priority in selection was considerable. These results are consistent with those of previous studies. For example, in the interest of older people in engaging in religious text reading

and prayer corresponded with Kolb's (2013) findings, as cited by Danielzadeh (25). Kolb (2013) and Hillen (2015) expressed that the elderly tended to perform the customs and the religious practices (20, 25), although, they face difficulties when performing the customs and the religious practices, due to the physical problems. However, they still try to carry them out to achieve the peace in spite of their aging (18, 19). Items such as scientific studies and attending lectures in the various fields were of interest to both sexes. Men were also eager to study history books, write about their favorite subjects, and attend concerts. These results support those of Hiemstra's (1982) study; this author reported the interest of elderly people in scientific studies, history books, and attending concerts (16, 25, 26). Less interest was seen in studying mathematics and political text reading in both sexes. No study was available to confirm this.

The participants expressed that the exercise facilities have been prepared according to their personal request. In terms of physical exercise, both sexes expressed the greatest interest in hiking and fitness. Men were eager to swim, but it seemed that they were not interested in other items in particular. Klyczek et al. (1997) stated that the elderly tend to take walks and engage in fitness rather than other sports due to physical weakness (6). Ping pong, tennis, and basketball were identified as the least favorite sports by the participants. Wikstrom (2006) and field research in Pennsylvania on the elderly showed that in addition to hiking, fitness, and swimming, they were fond of cycling and jogging (14). According to Table 3, women living nursing homes were less interested in cycling and other sports. Bherer (2013) and Cavalcante (2015) stated that cultural issues and the social structure affected men's and women's sports participation in previous years (27, 28). There are few facilities and opportu-

nities to gain this experience in youth; thus, individuals' reduced physical capacity and limited income during aging means that fewer people use sports facilities that require physical energy consumption and cost.

Using cluster analysis, the subsets of the three levels of individual interests in the groups were confirmed. Thus, the checklists can be suitably used for research. In addition, the data related to interest were confirmed.

There were some limitations in this study, such as the number of participants who met the requirements for interview; moreover, the participants needed to cooperate voluntarily. In addition, the managers of institutions needed to be willing to participate in this project. With regard to the specific concept of interest, this was a personal subject and the dignity of the elderly needed to be maintained through an appropriate relationship in the interviews. Thus, it required a lot of time to express the correct information, particularly when it came to religious views.

Overall, the results of the research showed that many activities were of interest to both sexes, such as making up, handling personal appearance, dressing up, going shopping, dusting, religious studies, saying prayers, scientific studies, attending lectures, attending concerts, hiking and, fitness. There were also differences between the sexes. Women were interested in cooking, while men wanted to study history books and attend concerts. The activities of least interest to the participants were laundry, driving, political studies, mathematics, ping pong, tennis, and basketball.

To achieve a healthy society, it is necessary for the values, interests, needs, and desires of individuals and families to be identified and protected. The results of this study can be used by authorities, caretakers at nursing homes, therapists, and especially the providers of social sciences, rehabilitation, medical sciences, and planning at all levels of decision making and management. This will help to prevent the waste of money and time and will facilitate elderly people's participation in specific programs and treatment to enhance their motivation and interest in the activities provided.

Acknowledgments

We would like to express our thanks to all the participants and other people who contributed in this study. We especially appreciated the assistance of the officials of the elderly office in the welfare organization in five different areas in Tehran, managers, assistants, and head nurses of nursing homes who cooperated in the project. In particular Dr. Farbod Fadaie and Dr. Raheb Ghorbani gave us valuable advice.

Footnotes

Authors' Contribution: Study concept and design: Massomeh Rasoulzadeh; acquisition of data: Massomeh Rasoulzadeh, Mina Sadat Mirshoja; analysis and interpretation of data: Massomeh Rasoulzadeh, Mina Sadat

Mirshoja; drafting of the manuscript: Mohammad Amouzadeh Khalili; critical revision of the manuscript for important intellectual content: Mona Simin Ghalam; statistical analysis: Alliakbar Pahlavanian; administrative, technical, and material support: Massomeh Rasoulzadeh, Mina Sadat Mirshoja; study supervision: Mehdi Rezaee.

Funding/Support: Neuromuscular Rehabilitation Research Centre, Semnan University of Medical Sciences, Semnan, Iran.

References

- Mahmoodi G, Azari N, Sanaati R. Assessment flyaway of life in elderly. *J Health Breeze*. 2013;3(1):50-45.
- Mohammad M, Shagh M. *The population of seniors in the 1385 to 1335 censuses*. Iran Data Portal; 2007. Available from: <https://www.princeton.edu/irandataportal/socioecon/topics/population/>.
- Saarnio L, Bostrom AM, Gustavsson P, Ohlen J. Meanings of aloneness at end-of-life among older people. *Scand J Caring Sci*. 2015. doi: 10.1111/scs.12246. [PubMed: 26058734]
- Cadmus EO, Owoaje ET, Akinyemi OO. Older persons' views and experience of elder abuse in South Western Nigeria: a community-based qualitative survey. *J Aging Health*. 2015;27(4):711-29. doi: 10.1177/0898264314559893. [PubMed: 25552528]
- Lee SW, Kielhofner G, Morley M, Heasman D, Garnham M, Willis S, et al. Impact of using the Model of Human Occupation: a survey of occupational therapy mental health practitioners' perceptions. *Scand J Occup Ther*. 2012;19(5):450-6. doi: 10.3109/11038128.2011.645553. [PubMed: 22214401]
- Klyczek JP, Bauer-Yox N, Fiedler RC. The Interest Checklist: a factor analysis. *Am J Occup Ther*. 1997;51(10):815-23. [PubMed: 9394142]
- Tuominen L, Leino-Kilpi H, Suhonen R. Older people's experiences of their free will in nursing homes. *Nurs Ethics*. 2014. doi: 10.1177/0969733014557119. [PubMed: 25488758]
- Fielding JE. Health Promotion and the Elderly: Why Do It and Where Does It Lead? A General Policy Perspective. *Home Health Care Serv Q*. 1986;7(3-4):263-9.
- Meyer L. [Elderly arrested people in correctional facilities : Challenge for health care]. *Z Gerontol Geriatr*. 2015. doi: 10.1007/s00391-015-0888-x. [PubMed: 25925765]
- Hickson J, Housley W. Creativity in later life. *Educ Gerontol Int Q*. 1997;23(6):539-47.
- Ihle A, Oris M, Fagot D, Baeriswyl M, Guichard E, Kliegel M. The Association of Leisure Activities in Middle Adulthood with Cognitive Performance in Old Age: The Moderating Role of Educational Level. *Gerontology*. 2015;61(6):543-50. doi: 10.1159/000381311. [PubMed: 25924661]
- Turcotte PL, Carrier A, Desrosiers J, Levasseur M. Are health promotion and prevention interventions integrated into occupational therapy practice with older adults having disabilities? Insights from six community health settings in Quebec, Canada. *Aust Occup Ther J*. 2015;62(1):56-67. doi: 10.1111/1440-1630.12174. [PubMed: 25649035]
- Intiso D, Di Rienzo F, Russo M, Paziienza L, Tolfia M, Iarossi A, et al. Rehabilitation strategy in the elderly. *J Nephrol*. 2012;25 Suppl 19:S90-5. doi: 10.5301/jn.5000138. [PubMed: 22419238]
- Wikstrom I, Book C, Jacobsson LT. Difficulties in performing leisure activities among persons with newly diagnosed rheumatoid arthritis: A prospective, controlled study. *Rheumatology (Oxford)*. 2006;45(9):1162-6. doi: 10.1093/rheumatology/kel080. [PubMed: 16531435]
- Thygesen LC, Fokdal S, Gjorup T, Taylor RS, Zwisler AD, Prevention of Early Readmission Research G. Can municipality-based post-discharge follow-up visits including a general practitioner reduce early readmission among the fragile elderly (65+ years old)? A randomized controlled trial. *Scand J Prim Health Care*. 2015;33(2):65-73. doi: 10.3109/02813432.2015.1041831. [PubMed: 26059872]
- Hiemstra R. Elderly Interests in the Expressive Domain. *Educ Gerontol*. 2006;8(2):143-53. doi: 10.1080/0380127820080205.
- Rasoulzadeh M. *Comoaring the interest of the elderly institutionalized people with respect to their gender*. Tehran: Social Welfare and

- Rehab University; 2000.
18. McKinnon AL. Sociology and Occupational Therapy: An Integrated Approach (1998). *Can J Occup Ther*. 2000;**67**(5):348.
 19. Dillworth J, Dickson VV, Mueller A, Shuluk J, Yoon HW, Capezuti E. Nurses' perspectives: hospitalized older patients and end-of-life decision-making. *Nurs Crit Care*. 2015. doi: 10.1111/nicc.12125. [PubMed: 25892177]
 20. Hillen JB, Vitry A, Caughey GE. Evaluating medication-related quality of care in residential aged care: a systematic review. *Springerplus*. 2015;**4**:220. doi:10.1186/s40064-015-0984-9. [PubMed: 26069870]
 21. Aida J, Kondo K, Kawachi I, Subramanian SV, Ichida Y, Hirai H, et al. Does social capital affect the incidence of functional disability in older Japanese? A prospective population-based cohort study. *J Epidemiol Community Health*. 2013;**67**(1):42-7. doi: 10.1136/jech-2011-200307. [PubMed: 22760221]
 22. de Luca K, Parkinson L, Pollard H, Byles J, Blyth F. How is the experience of pain measured in older, community-dwelling people with osteoarthritis? A systematic review of the literature. *Rheumatol Int*. 2015;**35**(9):1461-72. doi: 10.1007/s00296-015-3268-3. [PubMed: 25869349]
 23. Weening-Dijksterhuis E, de Greef MH, Scherder EJ, Slaets JP, van der Schans CP. Frail institutionalized older persons: A comprehensive review on physical exercise, physical fitness, activities of daily living, and quality-of-life. *Am J Phys Med Rehabil*. 2011;**90**(2):156-68. doi: 10.1097/PHM.0b013e3181f703ef. [PubMed: 20881587]
 24. Tan KK, He HG, Chan SW, Vehvilainen-Julkunen K. The experience of older people living independently in Singapore. *Int Nurs Rev*. 2015. doi:10.1111/inr.12200. [PubMed: 26058716]
 25. Kolb P. Implementation of Writing Across the Curriculum (WAC) learning approaches in social work and sociology gerontology courses. *Gerontol Geriatr Educ*. 2013;**34**(2):212-23. doi: 10.1080/02701960.2012.718011. [PubMed: 23383857]
 26. Day CL. *What older Americans think: Interest groups and aging policy*. Princeton University Press; 2014.
 27. Bherer L, Erickson KI, Liu-Ambrose T. A review of the effects of physical activity and exercise on cognitive and brain functions in older adults. *J Aging Res*. 2013;**2013**:657508. doi: 10.1155/2013/657508. [PubMed: 24102028]
 28. Cavalcante FG, Minayo MC, Gutierrez DM, de Sousa GS, da Silva RM, Moura R, et al. Tools, strategies and qualitative approach in relation to suicidal attempts and ideation in the elderly. *Cien Saude Colet*. 2015;**20**(6):1667-80. doi: 10.1590/1413-81232015206.03022015. [PubMed: 26060945]