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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии
საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman (Кириллица)**, для текста на грузинском языке следует использовать **AcadNusx**. Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - <http://www.spinesurgery.ru/files/publish.pdf> и http://www.nlm.nih.gov/bsd/uniform_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректур авторам не высылаются, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface - **Times New Roman (Cyrillic)**, print size - 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf

In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

**Articles that Fail to Meet the Aforementioned
Requirements are not Assigned to be Reviewed.**

ავტორთა საქურაღებოლ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დაიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx**. შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრაფიების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგების ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფხიხლებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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OLDER FARMERS OR ILLITERATE OLDER ADULTS ARE MORE LIKELY TO FALL: A COMMUNITY-BASED STUDY FROM CHINA

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Abstract.

Objective: The aim of this study was to determine the incidence of falls and its risk factors among community-dwelling older adults in a community from Wuhu city (China).

Methods: This cross-sectional study recruited 1075 older adults. The history of injury was assessed in the last year. Descriptive statistics were used for distribution of injury. Risk factors of falls were measured using logistic regression analysis.

Results: The results showed that the prevalence of falls in the last year was 8.47%. According to the results, farmer and illiteracy older adults were found as risk factors for falls. In our study, falls were the highest incidence of injury among community-dwelling older adults, farmer and illiteracy older adults were high risk population of falls.

Conclusion: Therefore, farmers and illiteracy older adults should be addressed when prevention of falls among community-dwelling older adults.

Key words. Incidence, older, fall, risk factors, injury.

Introduction.

Injury leads to about 5.8 million deaths worldwide and is becoming mainly contributors to morbidity and mortality [1]. Falls were one of the most common causes of injury [2,3]. Previous study found that 13% of the elderly in urban area experience falls each year in China, and 7.7% of the elderly were injured after falling [4]. The world is ageing rapidly. People aged 60 or older make up 12.3 percent of the global population, and by 2050, that number will rise to almost 22 percent [5]. Therefore, falls related injury of the older adults require huge cost for health care. With worldwide aging, falls become common problem in developing countries [6].

Although risk of falls is unclear [7]. Falls may be attributed to interaction of biological, behavior, and environmental factors. combination of biological, behavioral, and environmental factors [8-10]. Among them, sleep quality and pain are remediable risk factors [6]. Due to distinct sociodemographic, the incidence of falls and fall-associated risk factors was different between countries [4,8-11]. Epidemiology study found that age (66-70), gender, marital status, self-rated health, quantity of chronic diseases, quantity of disability items, activities of daily living and physical functioning had influence on the prevalence of falls in China older population [12].

However, there are a great difference in habit behavior and income between region in China. It is essential to evaluate the incidence of falls and its influencing factors in difference region of China and to enable development of control and prevention

programs for falls. Additionally, it is especially important to evaluate community-dwelling older adults living in their own homes. Therefore, door-to-door surveys are an available way to seek for the risk factors of falls in community-dwelling older adults.

To develop effective interventions, it is vital to know the factors contributing to falls.

Therefore, the objective of this study was to determine the incidence of falls and its risk factors among community-dwelling older adults in Wuhu city of China.

Materials and methods.

Subjects: This cross-sectional study was carried out in a community from urban of Wuhu city which located in Anhui province of China. This study recruited 1075 older adults aged 60 years and older, who can freely verbal communication without disability of hearing or speech. Written or oral consents were obtained from the older adults who agreed to participate in the study.

Measurement: Questionnaire consistent of the sociodemographic characteristics (age, gender, education background, income, marital status, sleep quality, and vocation) and injury related questions. Injury history within the past year was measured. Injury history was consisting of falls, sharp instrument, animal bite injures, traffic related injure, burning, poisoning, suicide attempt, and electrical injury. All the injury history was asked by retrospective recall of the individual. For example, older individuals were asked "if they have ever fallen down within the last year" to evaluate falls history. Subjective sleep quality of older individuals was asked "if they have ever had bad sleep within the last week" to measure subjective sleep quality.

Data collection: Older adults were instructed on the purpose and importance of the study. Questionnaire surveys were applied in face-to-face interviews by the researchers. All the questions were self-reported by the older adults.

Data analysis: The data were analyzed using the SPSS19.0 (SPSS Inc, II, Chicago, IL, USA). Descriptive statistics were used for characteristics of the participants. Logistic regression analysis was conducted to detect risk factors of falls. Fall in the last year was dependent variable; sociodemographic variables, age, educational level, income, marital status, sleep quality, and vocation were taken as independent variables. Results of the analysis were evaluated with odds ratio (OR) and corresponding 95% confidence interval (CI), P value less than 0.05 were considered as statistically significant. Chart was drawn by GraphPad Prism 5.0 (GraphPad Software Inc., San Diego, CA, USA).

Results.

A total of 1075 older adults were included in this study. In the study, 58.3% of the older adults aged 60-69 years old, 40.2% were illiteracy, 51.4% of the older adults were male, 47.8% had annual family incomes that were range 10000-30000 RMB, 73% were married, 40.8% had bad sleep quality history in the last week, 49.6% were farmer (Table 1).

Table 1. Characteristics of subjects included in this study.

Variables		frequency	percentage
Age(years)	60-69	627	58.3
	70-79	366	34.0
	≥80	82	7.6
Educational level	Illiteracy	432	40.2
	Primary school	290	27.0
	Middle school or above	353	32.8
Gender	Male	553	51.4
	Female	522	48.6
Annual family income (RMB)	< 10000	391	36.4
	10001-30000	514	47.8
	> 30000	170	15.8
Marital status	Married	785	73.0
	Single or divorced	290	27.0
Sleep quality	Good	636	59.1
	bad	439	40.8
Vocation	Worker	293	27.3
	Farmer	533	49.6
	Others	249	23.2

Characteristics of injury among the older adults were given in Figure 1. 8.47%(91/1075) of the older adults experienced fall in the past year, and 2.88%(31/1075) experienced sharp instrument injury, 2.60%(28/1075) experienced animal bite injury, 2.23%(24/1075) experienced traffic related injury, 1.77%(19/1075) experienced burning, 1.12%(12/1075) experienced poisoning, 0.47%(5/1075) experienced suicide attempt, 0.37%(4/1075) experienced electrical injury.

We next explored the cause of falls among older adults. Of 91 older adults with fall history in the last year, the majority cause of falls was playing, and the very 1 number of falls because of excising. (Figure 2).

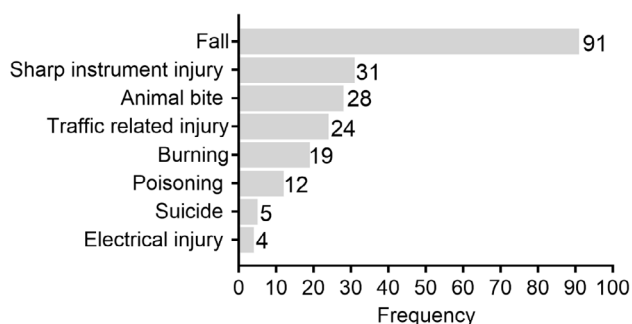
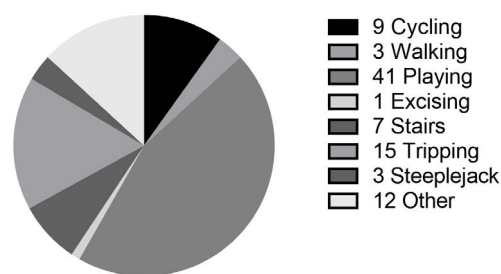


Figure 1. Frequency of injury pattern among older adults.



Total=91

Figure 2. Distribution of fall pattern among older adults.

To determine the risk factors of fall, univariate logistic regression analysis was conducted (Table 2). Based on the analysis, lower education level, female, lower annual income, unmarried, bad sleep quality, and farmer were identified as risk factors for falls. Older adults who were farmers were found to fall 4.37 times more than other older adults. Multinomial logistic regression analysis for factors of fall after controlling for gender and age (Table 3). The results showed that only farmer and illiteracy older adults were found as risk factors for falls ($P < 0.05$).

Table 2. Univariate logistic regression analysis for factors of fall.

Variables		OR	95%CI	P
Age(years)	60-69	0.48	0.23-0.96	0.04
	70-79	0.73	0.35-1.49	0.38
	≥80	Reference		
Educational level	Illiteracy	5.93	2.89-12.15	< 0.01
	Primary school	3.45	1.58-7.54	< 0.01
	Middle school or above	Reference		
Gender	Male	0.56	0.36-0.87	0.01
	Female	Reference		
Annual family income (RMB)	< 10000	4.19	1.77-9.96	< 0.01
	10001-30000	1.88	0.77-4.56	0.17
	> 30000	Reference		
Marital status	Married	0.66	0.42-1.03	0.07
	Single or divorced	Reference		
Sleep quality	Good	0.65	0.42-1.00	0.05
	bad	Reference		
Vocation	Worker	0.65	0.24-1.78	0.40
	Farmer	4.37	2.15-8.87	< 0.01
	Others	Reference		

Table 3. Multinomial logistic regression analysis for factors of falls.

Variables		OR	95%CI	P
Educational level	Illiteracy	5.93	2.89-12.15	< 0.01
	Primary school	1.69	0.72-3.98	0.23
	Middle school or above	Reference		
Annual family income (RMB)	< 10000	1.65	0.65-4.18	0.30

	10001-30000	1.50	0.60-3.73	0.39
	> 30000	Reference		
Marital status	Married	1.034	0.62-1.73	0.90
	Single or divorced	Reference		
Sleep quality	Good	0.79	0.50-1.24	0.30
	bad	Reference		
Vocation	Worker	0.595	0.21-1.63	0.31
	Farmer	2.81	1.24-6.40	0.01
	Others	Reference		

Discussion.

In the present study, we first explore the frequency of injuries in different types. The results showed that the annual incidence of falls was 8.47%. One reason why the incidence of falls in this study was lower than previously reported may be that the subjects were older adults who were active enough to go out and play, as many of the falls were caused by playing. Next, we found that the majority cause of falls among older adults with fall history in the last year was playing. Prevention of falls should be addressed when the older adults play outside. Additionally, the prevalence of falls found in this study was lower than that of previous studies (19.28%) [12]. The possible reason may be that our study was performed in community-dwelling older adults from urban areas. While previous study admitted older adults, who were from both rural and urban areas [4]. Older adults from urban areas may receive more education than older adults from rural areas.

Identifying risk factors of falls among older adults is an effective way to reduce the prevalence of falls. Our results also indicated that older adults from farmer or illiteracy were more times of falls than others. Farmer and illiteracy older adults may lack of awareness of falls prevention. Thus, related health education should be focused on the special population. more attention for preventing falls. Although no relationship was found between the subjective sleep quality of the older adults and falls in this study. Due to self-report sleep quality was used, which may make some bias to weak the relationship between sleep quality and falls of older adults. Furthermore, no relationship was found between education background, marital status, gender, and incidence of falls, which may attribute to the lower incidence of falls in this study than previous study. The larger sample study is also essential to explore the risk factors of falls.

Limitations.

The present study had some limitations. First, cross-sectional design used were not able to establish causal relationships between falls and characteristic variable. Second, 40.2% older adults were illiteracy and did not have a disability for verbal communication. Illiteracy and being a farmer are mentioned as risks for falls. This is not sufficiently considered as a mechanism. Low education may be a risk, but the mechanism linking farmers and falls is unclear. Illiteracy and being a farmer are mentioned as risks for falls. This is not sufficiently considered as a mechanism. Low education may be a risk, but the mechanism linking farmers and falls is unclear. Third, the results of this study relied on self-reports incidence of falls, which may have recall

bias. The presence or absence of dementia should be assessed in this study? Any cognitive decline could be associated with concerns about the accuracy of responses to questions and the risk of falls. In addition, there is no information on underlying medical conditions. Therefore, the effects of underlying medical conditions and medication side effects were not considered. Finally, the present study failure to survey some known risk factors for falls such as pain and use of sleeping pills.

Conclusion.

In our study, falls were the highest prevalence of injury among community-dwelling older adults. Farmer and illiteracy older adults have higher risk of falls. Therefore, farmers and illiteracy older adults should be addressed when prevention of falls among community-dwelling older adults.

However, cross-section design did not allow any insight into causality, which was mainly a limitation of the study. According to the results, prospective cohort study should be performed to evaluate the intervention of farmers and illiterate people on prevalence of falls.

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Conflict of interest.

The authors declared that the author has no funding or conflicts of interest to disclose.

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