Original Article

Participatory Evaluation of Older Adults' Self-neglect: A Case Study in Crowded Community, Bangkok

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Objective: To define risks or basic factors associated with older adults' self-neglect, clarify to appropriate meaning, and develop participatory self-neglect's management methods in crowded community.

Materials and Methods: Thirty-eight older adults including stakeholders were participated in focus group discussion to determine meaning older adults' self-neglect and developing self-neglect evaluation questionnaire. Older adults were assessed by this self-neglect questionnaire and presented overall information in community forum to develop self-neglect's management methods.

Results: Self-neglect in older adults' perspectives was defined as lack of physical and mental care in activity daily live. Twenty-one indicators were emerged and categorized into three key result areas: self-neglect risk factors, behaviors, and effects. Three first self-neglect risk factors were lack of self-care knowledge, older adults' physical and mental health problems. Similarly, self-neglect behaviors were deficit interaction with other people, lack of exercises and healthy diets affecting older adults' physical and psychological health, family's finance and psychological health. After reporting self-neglect information in community forum, two management methods were suggested including volunteer groups for taking care older adults and illegal loan change into legal loans with lower interest rates.

Conclusion: Older adults' self-neglect is essential to evaluate and develop a management plan to solve impact of older adults' self-neglect using community participation resulting in improving quality of life in older adults and their families.

Keywords: Self neglect, Elder abuse, Participatory evaluation, Self-neglect, Crowded community

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Self-neglect, is one of major types of elder abuse consisting of physical abuse, sexual abuse, emotional or psychological abuse, financial/material exploitation, and neglect, is defined as intentional (active) or unintentional (passive) meant that the refusal or miscarriage of an individual to fulfil any part of his or her duties to an older person, such as providing food, clothing, medicine, and so on. Similarly, self-neglect among older adults who refuse needed care or daily activities results from being confused and socially isolated due to their dementia, chronic illness, or substance abuse problems affecting abilities to safely manage their health resulting in getting more diseases such as hypertension, diabetes, depression and so on[1-4]. The American Psychological Association is estimated that each year more than 2 million older Americans fall to victim to any forms of abuse and neglect[1,2,5]. Prevalence of self-neglect in older adults with aged 60 years and up intended to increase from 37.2-48.02% between 1998-2006 and had female elders abused more than males[4,6]. This self-neglect may cause impact on older adults and their families.

Older adults' self-neglect affects among individual, family, community, social, and national levels. Individual impacts cause decrease in quality

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of life[9] and increase in risk of death[10]. Older adults' self-neglect also burdens their families in terms of providing care, resources, and finances because of complications of health problems and increase in needed care. Particularly, refusal care of older adults may cause family hostility or violence [1,2] resulting in accumulative health problems and health care costs affecting economic, social and national problems[1,2]. Thus, risk factor of older adults' self-neglect should be assessed to search for prevention methods.

There are many risk factors of older adults' self-neglect. Some studies revealed that socioeconomic factors including increased age, lower socioeconomic status, lesser levels of education, single marital status, and living alone had a significantly correlated increased incidence rate of self-neglect and depressive symptom and cognitive impairment were significant predictive factors[11,12]. Male, inappropriate use of medication/refused medication and visual disturbances were statistically significance predictors of older adults' self-neglect. Moreover, smoking and alcohol consumption could explain risk factors equal thirty-one percent[13]. Thus, older adults living in crowded communities, having many people living in a small house or limited space with poor environment[14,15], may be in high risk of self-neglect. Furthermore, indications of self-neglect are similar to caregivers' neglect including poor hygiene, malnutrition, dehydration, unclean and unsafe or hazardous living conditions[1-3]. Thus, self-neglect prevention and management for older adults must perform to enhance and maintain safety and decreased older adults' self-neglect[16].

Family and community participation are expected to solve these impacts and risk factors using reinforcement strategies including providing health care service at home, cleaning and maintenance service, speech and language therapy, hotline service for empowerment, health assessment via medical and nursing care team at home, and government health care service[2,3,6,16]. Unfortunately, older adults were assessed self-neglect by health care workers and social workers including risk factors, living conditions, task ability, cognitive ability, nutrition, social and environmental support[17]. Furthermore, it has no any studies related to older adults' self-neglect in Thailand, except violence[7,8]. Thus, the present study initiates older adults' self-neglect evaluation and problem solving in participants' context at a crowded urban community having older adults and being taken health care by registered nurses from Ramathibodi Hospital and Public Health Service Center II, Ratchaprarop, Rajchathewi District, Bangkok, Thailand. The present study was aimed to describe meaning of older adults' self-neglect and develop self-neglect's management methods using community participation. The findings could help to develop a guideline to prevent and manage older adults' self-neglect in the community resulting in increasing ability to perform daily live activity and improving quality of life in older adults.

Materials and Methods

A qualitative and quantitative descriptive study with integrating a participatory evaluation process was used including four stages: planning, implementing, analyzing data, and evaluating results[18].

Population, sample and setting

Population in this study were older adults, caregivers, community members and nurses in a crowded urban community, Ratchathewi District, Bangkok, Thailand being taken health care by Ramathibodi Hospital and Public Health Service Center 2, Ratchaprarop, Ratchathewi District, Bangkok, Thailand. This community is settled on land of Crown Property Bureau more than 90 years, had 145 households, 235 families, 905 persons (female = 52.49% and older adults = 11%). Most of them were employee (42%), merchant (33%) and had low socioeconomic status resulting in having psychological problem, especially in older adults found nearly 8 percent[19].

Participants were thirty-eight purposive participants living or working in this community at least a year, including 17 older adults, 8 caregivers, 7 members of community board and 6 nurses working at primary care unit of Ramathibodi Hospital, were recruited using snowball techniques. They were divided into five groups: two groups of older adults, caregiver group, community board group and nurse group for focus group discussion in order to enhance information for developing an older adults' self-neglect questionnaire for asking 65 older adults and their family members in the community.

Research Instruments

The evaluation instruments used in the present study were divided into three aspects as follows: Demographic Questionnaire consisted of basic characteristic consists of gender, age, religion, marital status, educational level, income, working status, illness, exercise, smoking, alcohol consumption, and feeling lonely.

Interviewing Guideline included questions of meaning, causes, behaviors and effects of self-neglect in older adults from perception and opinions of the participants in order to develop the self-neglect indicators and then construct self-neglect questionnaire for older adults.

The Older Adults' Self-neglect Questionnaire constructing after focus group discussion had 33 questions with rating scale from 1-5 (with "1" = "no" and "5" = "high" meaning having higher risk, behavior or impact of older adults' self-neglect). The possible score is possible from 33 to 165. The mean score was divided into three levels: low (1.00-2.33), medium (2.34-3.67) and high level of score (3.68-5.00) which meaning at high risk, behavior or impact of older adults' self-neglect.

Data collection and management

This study was approved by the Institutional Review Board, Faculty of Medicine,

Ramathibodi Hospital, Mahidol University (MURA2009/1586). All data was collected by three research assistances trained using focus group discussions, questionnaires, interviews, observation and public forums[20] in order to set indicators including 1) analyze Key Result Areas (KRA); 2) identify indicators from KRA; 3) clearly define each indicator; 4) specify a weight of value and scale; 5) specify formation source of indicator; 6) specify method of measurement; 7) specify method of analysis; 8) specify timeline; and 9) specify persons in charge of data collection[21].

All participants received written and verbal explanations, learnt of the objectives, methods, risks, benefits, and the right to withdraw from the study at any time throughout the study before giving written informed consent. Data collected would be kept strictly confidential and reported overall data. After that participants were asked informed consent and collected all data as follows:

Preparation and planning phase began with selecting community and preparing 11 participants as key persons to recruit new participants using snowball techniques and to assist building trust from community members.

Implementation phase were consisted of 1) interviewing key older persons in community related community history, traditions and culture; 2) collecting older adults information using questionnaire; and 3) focus group using interview guide and follow-up questions with observations and tape recordings after asking permission to determine meaning, causes, behaviors and effects of self-neglect in older adults from perception and opinions of the participants in order to develop the self-neglect indicators for older adults. Then, content analysis was conducted by transcribing verbatim to identify Key Performance Indicator (KPI) and KRA. Next step, KPIs were used to develop a Self-neglect Questionnaires using rating scale with "1" = "no" and "5" = "high" for assessing older adults' self-neglect. After that, researchers asked community members critique this questionnaire for revision.

Older adults and their families in community were asked to answer the Older Adults' Self-neglect Questionnaire by researcher. Then, all data were clean and analyzed using descriptive statistics for presentation preparation to community forum.

The research findings of older adults' self-neglect were presented to community forum in order to participatory discuss in order to develop methods of older adults' self-neglect prevention and management.

Statistical Analysis

Descriptive statistics including frequency, percentage, mean and standard deviation were used to analyze the demographic data and the older adults' self-neglect questionnaire. Content analysis was utilized by transcribing verbatim of all information from focus group discussion following analyzing KPI and KRA in order to answer research objectives.

Results

Findings in the implementation phase revealed that this crowded urban community having more population in the limited area settled in the era of King Rama the VI or around 90 years ago. This community has many resources, such as library, Primary Health Care Unit, Family Violence Notification Center and other societies. Many activities following traditions and cultures are performed in various opportunities such as New Year Festival, Songkran festival and so on. Only 76 from 95 registered older adults (80%) answered the demographic questionnaire. Most of them were female (56.58%), age more than 69 years (55.26%), half of them were married (55.3%), graduated from elementary school (55.3%) while high percentage of literate(92.0%) and no work (63.2%). All were Buddhist; 49.3 percent had average income more than 3,000 baht/month and the rest had less than 3,000 baht/month. They also had chronic diseases: hypertension and diabetes (88.2%) using universal health care coverage (85.6%), smoking (50%),

alcohol consumption (31.3%), and walking exercise (86.8%). They felt less to moderate lonely (29.3%) and depressed (30.7%).

Thirty-eight participants willingly participated in focus group discussion divided into 5 groups including 10 older adults living in less crowded area, 7 older adults living in crowded area, 8 caregivers, 7 members of community board and 6 nurses. Their characteristics are shown in Table 1.

According to group discussion, older adults' self-neglect was defined as carelessness of physical, mental and psychosocial aspects in activity daily live. Twenty one Key Performance Indicators (KPI) including 15 for older adults and 6 for their families were emerged as follows: 1) physical conditions of older adults; 2) mental conditions of older adults; 3) knowledge and information of self-care; 4) superstitiousness; 5) exercise; 6) proper rest; 7) proper nutrition; 8) drinking and smoking; 9) personal hygiene; 10) taking care of household and surrounding; 11) self-care during illness; 12) doing housework; 13) participation in outdoor activities; 14) effects towards physical condition of older adults; 15) effects towards mental condition of older adults; 16) the way family taking care of older adults; 17) lack of financial for taking care older adults; 18) uncomfortably of older adults' residents; 19) interactivity with other people; 20) effects towards mental condition of their families; and 21) effects towards financial situation of their families.

Then, all KPI were categorized to eight sub-key result areas as follow: 1) the older adults' capabilities of self-care, 2) supportive factors for older adults to take care of themselves, 3) practice on health promotion and prevention, 4) proper practice during illness, 5) participation in proper activities for older adults, 6) interactivity with other people 7) effects from self-neglect towards themselves, and 8) effects from self-neglect towards their families. Consequently, Key Result Areas (KRA) were characterized including risk factors related to self-neglect, behaviors related to self-neglect and effects of self-neglect in older adults. Factors related to self-neglect in older adults resulted from 1) themselves: physical and mental change, stress and anxiety, low self-esteem, chronic diseases and disability; 2) their families: lack of time to care, abandon, overprotect, and financial problems; and 3) environment: cold weather and crowded setting.

Moreover, older adults' behaviors related to self-neglect would be presented as poor personal hygiene, inactivity, refusal medical care and caregiver resulting in effects of self-neglect on both older adults and their families. There were lower self-esteem, psychological problems, complications of diseases and lower quality of life in older adults. Self-neglect in older adults also caused their families to be unhappy, waste time and money, moody and psychological problems, and burden for taking-care.

The Self-neglect Evaluation Questionnaire was developed based on the 21 KPI consisted of 33 items including 24 questions for older adults related to risk factors, behavior, and impacts of self-neglect; and 9 items for families caregivers. Only 65 older adults and family members willingly answered the Self-neglect Evaluation Questionnaire. The findings revealed that the three highest average score of indicators on older adults' self-neglect were exercise (M = 2.68), proper nutrition (M = 2.67) and physical condition of older adults (M= 2.65) as shown in Table 2.

Finally, the researcher presented older adults' self-neglect results to public forum in order to discuss and enhance methods to prevent and manage older adults' self-neglect. Unfortunately, two ways suggested for prevention and management of older adults' self-neglect differently from the results because of financial situation including volunteer groups for taking care older adults and illegal loan change into legal loans

Table 1. Characteristic of participants in focus group discussion (n = 38)

Group	Gender (person)		Age (years)	Mean(SD) (years)	Education
	Male	Female			
Older adults living in less crowded area (n = 10)	4	6	60 to 80	72.30 (7.13)	No–Secondary school
Older adults living in crowded area (n = 7)	3	4	60 to 76	67.86 (5.40)	Elementary school
Caregivers' older adults (n = 8)	2	6	14 to 50	33.41 (10.76)	Elementary school – Bachelor degree
Members of community board (n = 7)	4	3	45 to 83	64.43 (11.65)	Elementary school – Bachelor degree
Nurses (n = 6)	0	6	28 to 55	40.83 (10.03)	Master degree – Doctorate degree

with lower interest rates. The first one should be built for taking care older adults in the community resulting in decreasing risks of self-neglect and improving good behavior of older adults, as well as better relationships among them, family and community members. The last one was suggested to change illegal loans to legal loans with lower interest rates resulting in lesser financial burden of older adults and their families and having enough time for taking care older adults.

Discussion

The results revealed that older adults' self-neglect meant inaccuracy of physical, mental and psychosocial aspects in activity daily live. This definition is congruent with previous studies stated that older adults needed care related to activity daily live from their caregivers such as healthy food, clean cloth, housing, and medical care[1-4]. Besides, 21 KPI emerged being classified to eight sub-key result areas and then three KRA to

Table 2. Mean score of older adults' self-neglect indicators

Indicator	Average Scores	Evaluation Level
1. KRA-Factors related to self-neglect in older adults	1.81	low
1.1 Sub KRA –Older adults' capabilities of self-care	2.02	low
1.1.1 Physical conditions of older adults	2.65	medium
1.1.2 Mental condition of older adults	2.21	low
1.1.3 Knowledge and information of self-care	1.97	low
1.1.4 Superstitiousness	1.26	low
1.2 Sub KRA –Supportive factors for older adults to take care of themselves	1.59	low
1.2.1 The way families take care of older adults	1.60	low
1.2.2 Availability of funds for older adults to take care of themselves	1.53	low
1.2.3 The appropriateness of older adults' residents	1.63	low
2. KRA-Behaviors related to self-neglect in older adults	1.95	low
2.1 Sub KRA – Practice on health promotion and prevention	1.83	low
2.1.1 Exercise	2.68	medium
2.1.2 Proper rest	1.62	low
2.1.3 Proper nutrition	2.67	medium
2.1.4 Drinking and smoking	1.28	low
2.1.5 Personal hygiene	1.26	low
2.1.6 Taking care of household and surrounding	1.44	low
2.2 Sub KRA - Proper practice during sickness	1.82	low
2.2.1 Self-care during sickness	1.82	low
2.3 Sub KRA - Participating in proper activities for older adults	1.77	low
2.3.1 Doing housework	1.31	low
2.3.2 Participation in outdoor activities	2.22	low
2.4 Sub KRA – Interactivity with other people	2.39	medium
2.4.1 Interactivity with other people	2.39	medium
3. KRA –Effect from self-neglect in older adults	1.3	low
3.1 Sub KRA – Effects from self-neglect towards themselves	1.18	low
3.1.1 Effects towards physical condition of older adults	1.09	low
3.1.2 Effect towards mental condition of older adults	1.26	low
3.2 Sub KRA – Effects from self-neglect towards their families	1.42	low
3.2.1 Effects towards mental condition of their families	1.59	low
3.2.2 Effects towards financial situation of their families	1.25	low

*KRA: Key Result Areas

present risk factors and behaviors causing impacts in older adults. Factors related to older adults' self-neglect might result from their own self, their families and environment, such as their chronic diseases, financial problems, and extraordinary situation. These results are similarly in some studies reported that chronic disease, malnutrition, dehydration, and acute hospitalization were risk factors for older adults' self-neglect [8, 17, 22]. Other studies found that depressive symptom and cognitive impairment, low socioeconomic status, inappropriate use of medication/ refused medication were statistically significance predictors of older adults' self-neglect[8,11,13,22].

This present study also found older adults' self-neglect behaviors such as poor personal hygiene, inactivity, refusal medical care and care from caregiver being congruent with some studies[1-3] resulting in affecting on both older adults and their families such as lower self-esteem, psychological problems, complications of diseases, families' psychological problems, loss money, and burden for taking care older adults. Thus, older adults' self-neglect prevention and management must perform to solve the problems[1-3].

Using community participation as positive reinforcement strategies assisted to correct older adults' self-neglect and its impacts. Two methods were suggested including volunteer groups for taking care older adults and illegal loan change into legal loans with lower interest rates. This is the better way to help them and their families coped with old illegal debt based on low income situation. They did not have more time to take care their older adults because of working hard to earn money for their lives. If families or caregivers paid less money, they would have more time to take care older adults. Thus, the volunteer groups were the best way to help older adults in difficult activity daily live and to act as friends to talk, entertain and train any performance for older adults leading to decrease in loneliness and higher performance resulting in improving wellness and happiness in the community context. Finally, families or caregivers would have low cost and could earn high income resulting in no debt in family leading to good quality of life of older adults and their families.

Conclusion

Older adults' self-neglect is crucial to evaluate and develop the prevention and management plan to resolve risk factors, behaviors and impact of older adults' self-neglect using community participation resulting in two approaches consisted of volunteer groups for taking care older adults and illegal loan change into legal loans with lower interest rates leading to improving quality of life in older adults and their families.

What is already known on this topic?

Older adults' self-neglect is a type of elder abuse occurring both intention and non-intention resulting from aging, low education, low income, having chronic illness and living alone. Previous self-neglect instruments were developed by health care team and social worker in the clinic, but in community context.

What this study adds?

This present study added participatory evaluation of older adults' self-neglect by older adults, families and community in order to enhance the best method to manage older adults' self-neglect in crowded community context due to the participants' problems will be solved by them and their families or communities. Thus, two management methods to correct older adults' self-neglect in crowded community context should be the better way to apply in the similar situation.

Potential conflicts of interest

The authors declare no conflict of interest.

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