# ORIGINAL ARTICLE QUALITY OF LIFE THROUGH LISTENING MUSIC AMONG ELDERLY PEOPLE IN SEMI-URBAN AREA, THAILAND

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Background: Aging is one of the biggest problems in Southeast Asia due to their rapidly growing population of the older person. Old aging population is usually confined to their homes resulting in poor quality of life (QOL). Music has been found to be the great activity for older peoples with physical, emotional and social disorders hence, it affects on quality of their life. This study explored the music preference among elderly people and their quality of life in the semi-urban of Thailand. Method: A cross-sectional study was conducted by interviewing 353 elderly individuals living in the semi-urban area of Thailand. A validated, reliable world health organization quality of life (WHOQOL-OLD) tool was adapted for this study. Logistic regression analysis was performed to identify the factors associated with QOL and its six domains with adjusted covariates, and the potential factors including chronic disease, community participation, traditional event participation, the experiences of music listening, and the types of music preference were entered in the model. Results: Findings revealed that more than half of respondents were married female with an average age of 68.92±6.99. Around (80.7%) suffered from chronic diseases and the hypertension was found the highest (66.32%). The quality of life among the elderly was found at the moderate level with the total OOL score of 83.41±SD=10.32. Respondents with chronic diseases have the total OOL score (OR=0.95, 95% CI 0.93-0.98). Respondents who preferred to listen to Look Krung (Thai popular classic music) type have the total QOL score (OR=1.03, 95% CI 1.01-1.05), Autonomy Facet(AUT) score (OR=1.11, 95% CI 1.02-1.21), and Intimacy facet(INT) score (OR=1.14, 95% CI 1.05–1.24) as compared to those who did not listen the music. Conclusion: The study highlights the relationship between the QOL among aging people and the listening of music in the semi-urban area of Thailand.

Keywords: Quality of Life; Music Preference; Elderly and Aging life J Ayub Med Coll Abbottabad 2017;29(1):21-5

## **INTRODUCTION**

Globally, it is reported that the Aging population has been increasing recently. In Thailand, older population increased from 10.5 to 12.3 percent in last decade, and it is projected to be 17.2 percentage by the end of 2025.<sup>1</sup> This population is facing multiple health problems including communicable and noncommunicable infections. However, social negligence and economical burden are the more prevalent issues faced by this group.<sup>2</sup> Music played a vital role for physical and mental relaxation with changing of mood among people.<sup>3</sup> In the elderly people, it has been known that the music can promote their emotion and to reduce the feelings of loneliness.

Hence, it has also proved that the music could influence on older people and improve their quality of life.<sup>4</sup> Many researches had found that an appropriate selection of music types and preference are also important in promoting the well-being and quality of life among old persons.<sup>5,6</sup> Slow music is more beneficial as compared to louder sounds among this population and positively effect on their emotions.<sup>7</sup> Another study found that the combination of music activities reduced the emotional problems including some mental stress has also been decreased while listening the music alone in old population.<sup>8</sup> Hence, music can build up more understanding within family members and better relationships that ultimately promote more relaxation among aging group.<sup>9</sup> Thailand is also facing the rapid growth of elderly population; number has significantly increased from 7.2–11.5% during the last two decades. Recently, the economic, social, and lifestyle changes are also responsible for the poor quality of life among older population. Hence, these factors are also affecting the family structure and life style among older people. This vulnerable group needs special attention from their family members and need to be involved in the routine daily life activities.<sup>10</sup>

Hitherto, there is scarcity on study on quality of life and music preference among the elderly has been reported in literature. This study has addressed the importance of music listening on quality of life by using World Health Organization Quality of Life questionnaire-version for older people (WHOQOL-OLD)<sup>11,12</sup> among older people, which is useful in planning of an on-going intervention appropriately and efficiently in highly aging populous countries.

## MATERIAL AND METHODS

This was a cross-sectional study conducted by interviewing elderly people (aged ≥60 years) living in Maung district, Samutprakarn province, Thailand. About 24.623 elderly people living in study area were invited through an announcement via radio and newspaper advertisement. Finally, 353 aged people participated in this study, as per sample size calculated by using the statistical tables of Herbert Arkin and Raymond R. Colton.<sup>13</sup> A validated and reliable tool (WHOQOL-OLD) were adopted for this study through trained data collectors.<sup>12</sup> Score was categorized into three groups; 24-55 points indicated a poor quality of life, 56-88 points indicated a moderate quality of life, and 89-120 points indicated the high quality of life. Data were analyzed through descriptive statistics to characterize the samples and assess socio-demographic factors like; the quality of life score, and the community participation and music preference. Logistic regression analysis was performed to identify the factors associated with the total QOL and its six domains score. The regression analysis, Odd ratio, Confident Interval, and p-value were also calculated in this study. Study was approved by the Ethics Review Committee for Research Involving Human Research Subjects, Health Science group, Chulalongkorn University, Thailand and written consent were obtained from the participants before to start an interview.

## RESULTS

The mean age of respondents was 68.92±6.98 and majority of the participants were female 64.9 percent. Around 57.8 percent participants were married with 3 children (Table-1). Nearly, 61.2% of the elderly respondents completed their primary schooling, and 18.4 percent of respondents attended the secondary school. Most 60.6% of the elderly people replied that they are currently unemployed. However, among the elderly were working as general worker (37.4%), merchant (29.5%), retirement from the government officer (23.0%), and business owner (8.6%), respectively. Most of the respondents 90.7 % were living with other people. Almost all respondents 90.9% had the annual health check-up and more than threefourth of the elderly samples 80.7% have been suffering from chronic diseases.

Among the elderly suffering from chronic diseases, hypertension was found the highest 66.3% followed by dyslipidaemia 50.5, diabetes 27.3, and heart disease 7.7% (Table-1). For the respondent's health problems, more than half of them 61.5% replied that they had been experiencing in the visual problem. About one-third of respondents were having the problems with hearing, walking, and memory accounted for 30.3, 38.5, and 35.1%, respectively. Most of the elderly

respondents 89.8% never smoked and more than threefourth 80.2% had not been drinking. Respondents mostly went to the public hospital 45.9 for receiving the health care service and 38% went to the district health promotion hospital. Almost all of respondents 98% were entitled to health insurances. 77.4% of them used nation coverage. Most respondents 81 % had joined the social or community activities and more than one-third of those 38.5% sometimes attended the social or community activities followed by 37.1% of every time attending. Almost all of the respondents 89% replied that they were listening to the music, and only 11% had never experienced to the music listening (Table-2). Only 8.5% of the respondents reported that they had experienced in playing the music. Half of the elderly 50.6% who had been experiencing the music considered that music led them to the relaxation. In addition, almost all of the respondents 96.6% agreed that music caused the happiness and 87.5% of all elderly respondents also agreed that music activities could make them happier.

The quality of life of the elderly: The mean score of the quality of life (total QOL) in the elderly participants was found  $83.41\pm10.32$  which was at the moderate level. The findings of the mean score of the six domains were showed in table-3. Table 4 shows that the logistic regression with factors associated with QOL and its six domains.

Table-1: Socio-demographic chara		
Variables	n	%
Age		
60–69	202	57.2
70–79	111	31.4
80-89	38	10.8
90 and over	2	0.6
(Mean = 68.92, SD= 6.98, Min= 60, Max= 91)		
Gender		
Female	229	64.9
Male	124	35.1
Marital Status		
Single	14	4.0
Married	204	57.8
Separated/ Divorce	30	8.5
Widow	91	25.8
Living together without marriage	14	4.0
Education levels		
No education	42	11.9
Primary school	216	61.2
Secondary	65	18.4
Diploma	14	4.0
Bachelor's degree & higher	16	4.5
Working status		
Unemployed	214	60.6
Employed	139	39.4
Number of Children	(Mean±SD)	
Number of Chnuren	2.59±	1.53
Numbers of members living in the same	(Mean	±SD)
household with the elderly	2.53±1.877	
Chronic diseases diagnosed by Healthcare		
professional		
Yes	285	80.7
No	68	19.3
Type of Chronic diseases (n=285)		
Hypertension	189	66.32
Dyslipidemia	144	50.53
Diabetes	78	27.37
Heart disease.	22	7.72

Table-1: Socio-demographic characteristics

preference among eracity	people in study area				
Variables	n		%		
	Yes	No	Yes	No	
Community Participation	286	67	81.0	19.0	
Traditional event Participation	321	32	90.9	9.1	
Music listening experience	314	39	89.0	11.0	
Kind of music preferred to listen					
Look Thung	225 47.2		7.2		
Look Krung	149		31.2		
Thai Deam	85		17.8		
Sakon	18		3.8		

# Table-2: Community participation and music preference among elderly people in study area

#### Table-3: Quality of life score and 6 facets among the elderly in the study area (n=353)

the elderry in the study area (1-555)					
QOL Scores	Mean	SD.			
Sensory Ability facet (SAB)	12.25	2.96			
Autonomy facet (AUT)	14.25	2.62			
social participation facet (SOP)	14.34	2.84			
Past, present, and future activity facet (PPF)	14.39	2.55			
death and dying facet (DAD)	14.05	3.31			
intimacy facet (INT)	14.12	2.74			
Total QOL	83.41	10.32			

## Table-4: Logistic regression determining factors associated with the quality of life and its six domains

Factors	Total QOL OR (95% CI)a	SAB OR (95% CI)a	AUT OR (95% CI)a	SOP OR (95% CI)a	PPF OR (95% CI)a	DAD OR (95% CI)a	INT OR (95% CI)a
chronic diseases diagnosed	0.95	0.96	0.96	0.83	0.81	0.91	0.88
	(0.93-0.98) *	(0.88 - 1.05)	(0.87 - 1.05)	(0.75-0.92)*	(0.72-0.90)*	(0.84-0.99)*	(0.79-0.98)*
Community Participation	0.98	0.95	1.00	0.91	0.88	0.99	0.93
	(0.96 - 1.00)	(0.87 - 1.03)	(0.91 - 1.10)	(0.82-0.99)*	(0.79-0.98)*	(0.91 - 1.08)	(0.85 - 1.02)
Traditional event	0.97	0.97	1.05	0.87	0.74	1.01	0.91
participation	(0.94 - 1.01)	(0.86 - 1.08)	(0.92 - 1.19)	(0.77-0.99)*	(0.63-0.87)*	(0.90 - 1.13)	(0.81-1.03)
Music listening experience	0.98	0.99	0.96	1.00	0.93	0.89	0.85
	(0.95–1.01)	(0.88–1.11)	(0.86 - 1.07)	(0.89 - 1.12)	(0.82 - 1.06)	(0.80-0.98)*	(0.76-0.95)*
Look Thung	0.98	0.99	1.00	0.90	0.92	0.97	1.01
	(0.96 - 1.01)	(0.92 - 1.07)	(0.92 - 1.09)	(0.83-0.97)*	(0.85 - 1.01)	(0.91 - 1.04)	(0.93–1.08)
Look Krung	1.03	1.03	1.11	1.04	1.07	1.03	1.14
	(1.01-1.05)*	(0.96–1.11)	(1.02-1.21)*	(0.97 - 1.13)	(0.98 - 1.17)	(0.96 - 1.10)	(1.05–1.24)*
Sakon	1.00	0.72	1.15	1.18	1.14	0.91	1.08
	(0.9–51.05)	(0.58-0.88)*	(0.95 - 1.40)	(0.99 - 1.42)	(0.93-1.39)	(0.78 - 1.07)	(0.90-1.31)
3 4 1 4 1 6	1.1 1			1 11	111 1 1	1 1 1 1	

<sup>a</sup>Adjusted for age and the numbers of members living in the same household with the elderly variables in the model.

\*Statistically significant (*p*-value of <0.05)

## DISCUSSION

Our study shows that majority of females had participated in this research. It has also been proved that female listeners were more likely to listen to the classic song and the song that have the fast tempo than male.<sup>14,15</sup> Most of the respondents were living with other people; however, they were actually left at home alone and were listening the music at home. This was consistent with the previous studies which indicated the similar results of the music style preference among the elderly.<sup>16</sup> The mean score of the quality of life (total QOL) among the elderly participants was found 83.41±10.32 reported at the moderate level. The previous studies have supported the results and showed similarly in the quality of life among aging in the semi-urban area.<sup>17,18</sup> When considering each domain, sensory ability facet (SAB) was revealed the lowest mean score among the six domains. This might be according to the fact that more than three-fourth of the elderly samples reported that they have been suffering from chronic diseases (80.7%), and most of them also reported their health problems including visual, taste, walk, movement, memory, and etc. The previous studies had supported this study and showed the similar results.<sup>19,20</sup> This also can be explained by the concept of changes and health problems in the elderly which stated that the changes in the elderly can cause the loss of their role and confidence in the ability resulting in the decrease of selfworthiness and the quality of life.<sup>21,22</sup> Respondents who had the chronic diseases were less likely to have the total QOL score and SOP, PPF, DAD, and INT domain score than the respondents who did not have. Not surprisingly, the previous studies had found the similar results that the elderly people diagnosed with chronic diseases had lower QOL than those who did not have the diseases.<sup>17,20,21,23</sup>

The elderly respondents who participated in the community activities and traditional activity participation were likely to have the SOP domain score and the PPF domain score less than the respondents who did not. This can explain that the elderly who participated in the activities in both community and traditional activities tended to neglect their satisfaction and achievements in life because of the overabundant concentration in the participation with others. This could lower those domains of the QOL.

Moreover, experiencing in music listening had lowered the DAD and INT domain score among the elderly. With the results of the music preference, the elderly people might prefer to listen to the song that could affect their feeling and emotion such as Look Thung which was generally written with the rural lifestyle, religious beliefs, and cultural and social pattern. The lyrics could be the negative experiences of those beliefs, emotion, and lifestyle influencing their DAD and INT domains.<sup>24</sup>

The elderly people who preferred to listen to Look Krung song likely increased the total QOL score, AUT facet score, and INT facet score as compared to those who did not prefer to listen to this type of song. This could explain that Look Krung or Thai popular music is similar to the rhythm of the heartbeat (60-80 beats per minute) which is the most preferred tempo closed to the cycle of heartbeats.<sup>25</sup> Previous studies had also supported this study that the fundamental frequency of the individual heart beat (72 beats/ min) affects the total unity with the frequency of the body and the person's emotion and spirit.<sup>25-30</sup> Furthermore, Look Krung song is written in the form of a smooth poem explaining a sense of the community and the chronicle with emotional tone of the soft, delicate, and intricate lyrics and the nostalgic feeling.<sup>31</sup> This reflects the phenomenon of the nostalgic moment from the music experience that could be the flashbacks and the sensibilities of familiar atmosphere.

Nostalgia is a way of looking at the world or how to give meaning to the life of one human being by emphasizing the importance of imagination and emotion becoming the part of the cultural life of the individual and the society in general.<sup>32</sup> Look Krung song can create the memorial moment for the elderly people with experiences over time. This relationship is formed by the aesthetic experience and phenomenon of life along with Look Krung music at the period of time which could coincide with the individual memory and collective memory for the events during that time either positive or negative memories; however, they can create emotional experiences of a person. In the elderly, the popular music song was found to be the representative of the various memories that could be sadness, happiness, and love.<sup>6</sup>

This recalled them from their memorial events because of its nature of accessible and simple communication with the connections of music to life experience that can cause a feeling and mood to listen to selected music for inducing the happiness and satisfaction.<sup>33</sup> Not surprisingly, this kind of music may result in a positive quality of life for the total score of all domains and the domain of autonomy (AUT) and intimacy (INT) as it appears.

### CONCLUSION

The study has concluded that the QOL in aging people is related to the type of music preference, and all elderly respondents also agreed that music activities could make them happier if they are attending. Consequently, music activity that concentrates on the selecting appropriate types of music for the elderly's preference needs to be considered for creating the cost-effective and successful intervention in the form of music activities for improving the quality of life in aging people.

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### **AUTHORS' CONTRIBUTION**

SW and BB contributed the substantial conception and design. SW and RS did the data analyses and interpretation. RK and NK drafted the successive drafts of the article. BB, RS and NK critically revised and added the intellectual content to the article. All authors read and approved the final version of the article.

### REFERENCES

- WHO. 50 Facts: Global health situation and trends 1955-2025 [Internet]. [cited 2016 May 10]. Available from: http://www.who.int/whr/1998/media\_centre/50facts/en/
- 2. Prasatkul P, editor. The Situation of the Thai Elderly 2014. Bangkok: Amarin Publishing, Ltd.; 2015.
- Chlan LL. Music intervention. In: Snyder M, Lindquist R, editors. Complementary & alternative therapies in nursing. 6th ed. New York: Springer; 2010. p.91–105.
- 4. Clair AA. Therapeutic Uses of Music with Older Adults. Baltimore: Health Professions Press; 1996.
- Sasithorn P. Music therapy. Songkla Med J 2005;23(3):185– 91.
- 6. Sung HC, Chang AM, Lee WL. A preferred music listening intervention to reduce anxiety in older adults with dementia in nursing homes. J Clin Nurs 2010;19(7-8):1056–64.
- 7. Remington R. Calming music and hand massage with agitated elderly. Nurs Res 2002;51(5):317-23.
- Cassileth BR, Vickers AJ, Magill LA. Music therapy for mood disturbance during hospitalization for autologous stem cell transplantation: a randomized controlled trial. Cancer 2003;98(12):2723–9.
- Jonas-Simpson CM. The experience of being listening to: a human becoming study with music. Nurs Sci Q 2003;16(3):232–8.
- 10. Chunharas S, editor. Situation of the Thai elderly 2008. Bangkok: TQP Publishers; 2009.
- Power M, Quinn K, Schmidt S. Development of the WHOQOL-Old module. Qual life Res 2005;14(10):2197– 214.
- WHO. WHOQOL Old manual. WHO European office (Copenhagen); [Internet]. [cited 2016 May 10]. Available from:

 $http://www.diakonova.no/neted/services/file/?hash=a17f4bcd\ 06910c546670c6fbdee0cb0f$ 

- 13. Arkin H, Colton RR. Tables for Statisticians. 2nd ed. Barner & Noble Inc: New York; 1963.
- 14. Whiteley S. Women and popular music. Sex Identity Subj Lond New York Routledge; 2000.
- 15. Leonard M. Gender in the music industry: Rock, discourse and girl power. Ashgate Publishing, Ltd.; 2007.
- Lai HL. Music preference and relaxation in Taiwanese elderly people. Geriatr Nurs 2004;25(5):286–91.
- Siripanya J, Pratanwarapanya W, Kamwong W. Factors Relating to Quality of Life of Elderly. J Health Sci Res 2011;5(2):32–40.
- Patricia KP, Chapman NJ. Urban form and older residents' service use, walking, driving, quality of life, and neighborhood satisfaction. Am J Health Promot 2004;19(1):45–52.
- Somrongthong R, Hongthong D, Wongchalee S, Wongtongkam N. The Influence of Chronic Illness and Lifestyle Behaviors on Quality of Life among Older Thais. Bio Med Res Int 2016;2016:2525941.
- Yodmai K, Phummarak S, Sirisuth JC, Kumar R. Somrongthong R. Quality of life and fear of falling among an aging population in semi-rural, thailand. J Ayub Med Coll Abbottabad 2015;27(4):771–4.
- De Luca d'Alessandro E, Bonacci S, Giraldi G. Aging populations: the health and quality of life of the elderly. Clin Ter 2011;162(1):e13–8.
- Piensriwatchara A, Banpuan W, editor. Thai Elderly Health 2013. Bangkok: Wacharin Publishers; 2013.

- 23. Tharin Sukanun SJ, Thummanon T, Jitpakdee P. Quality of Life of the Elderly in Bansuan Municipality, Chonburi Province, Thailand. J Public Health 2011;41(3):240–9.
- 24. Suwan S. Thai music in Thai culture. Bangkok: Active printed; 2006.
- Iwanaga M. Relationship between heart rate and preference for tempo of music. Percept Mot Skills 1995;81(2):435–40.
- 26. Brewer JF. Healing sounds. Complement Ther Nurs Midwifery 1998;4(1):7–12.
- Guzzetta CE. Music therapy. In: Dosses BM, editor. Core curriculum for holiitu nursing Gaithersburg. MD: Aspen. 1997. p.196–204.
- Rhoades R, Pflanzer RG. Human physiology. 3rd ed. Fort Worth: Saunders College Pub; 1996. p.978.
- 29. Andrews T. Music therapy for non-musicians. 1st ed. Batavia, Ohio: Dragonhawk Pub; 1997. p.325.
- Todaro-Franceschi V. The enigma of energy: Where science and religion converge. New York: Crossroad Publishing Company; 1999.
- Amatayakul P. Music Appreciation: An introduction to Thai music appreciation. 2nd ed. Bangkok: Siamsamai, Co., Ltd.; 1986.
- 32. Kittiarsa P, editor. Anthropology and the Study of Social Phenomena of Nostalgia in Contemporary Thai Society. Bangkok: Princess Maha Chakri Sirindhorn Anthropology Centre (Public Organization); 2003.
- Krangsaard-ard S. Adults' singing activities of lukkrung songs: a case study of amateur Thai sakon singers and musicians club, Bangkok: Mahidol University; 2012.

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