LONELINESS IN PEOPLE AGED 50-80 YEARS IN L.DHAN’BIDHOO:
REASONS FOR BEING LONELY

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THE MALDIVES NATIONAL UNIVERSITY

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LONELINESS IN PEOPLE AGED BETWEEN 50-80 YEARS IN L.DHAN’BIDHOO: REASONS FOR BEING LONELY

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A project submitted in partial fulfillment of the requirements for the degree of Bachelors in Primary Health Care

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ABSTRACT

Nowadays we see a lot of elderly people who live a lonely life. The purpose of this study is to investigate the reasons or to identify the factors which leads to loneliness in the elderly. This is a quantitative study. The objectives of the study is to find the reasons for the people aged 50-80 to be lonely, who lives in L. Dhan’bidhoo. Cross sectional study is used in this research. Random sampling technique was used to collect data and an interviewer administered questionnaire was used. SPSS was used to analyze the data. The results show that mostly women feel lonely than men.

Keywords: loneliness, social support, elderly
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I would like to thank my peers and my family for helping me throughout the project. And I would like to thank Mr. Mohamed Zaidh for guiding me with the SPSS and how to analyze the results of the project.
DECLARATION

Name: Asiyath Shahyra

Student Number: 37458

I hereby declare that this Project is the result of my own work, except for quotations and summaries which have been duly acknowledged.

Signature: …………………… Date: 14.11.2016
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LIST OF ABBREVIATIONS

CVA – Cerebrovascular Accident

HBM – Health Belief Model

IGMH – Indira Gandhi Memorial Hospital

MoH – Ministry of Health

SPSS – Statistical Package for the Social Sciences

UCLA: University of California Los Angeles
Chapter 1

INTRODUCTION

1.1: Introduction

“Loneliness is described in various studies as: perceived deprivation of social contact, the lack of people available or willing to share social and emotional experiences, a state where an individual has the potential to interact with others but is not doing so and a discrepancy between the actual and desired interaction with others” (Christina Victor, 2001). Nowadays the quality of life is improving rapidly with the new technologies, the health of people is improving thus living a longer life. L. Dhan’bidhoo is one of the inhabited islands in the Hahdhunmathi atoll, commonly known as Laamu atoll. According to Census 2014, there are 647 people living on the island. Out of which 625 are Maldivians and 25 are expatriates (National Bureau of Statistics, 2014). According to Health Ministry of Maldives, there is no research done on the loneliness of the elderly.
1.2: Background to the Study

In an age where communicating with a friend or family member on the other side of the country takes no more than a few clicks of a mouse, or a few taps on a cell phone screen, research indicates that we are, as a society, lonelier than we have ever been. “The high percentage of older people living alone reflects the household changes resulting from death of a spouse (or their entry into long term care) and the trend for older people and adult children to live independently” (Christina Victor, 2001). Rona Dury in National Centre for Biotechnology Information states that loneliness and social isolation are more vulnerable to older people than others, and are more at risk of a range of health and social issues which can be directly linked to loneliness (Rona Dury, 2014). Moreover there is a Centre at K. Gurai dhoo for elderly people. When enquired about the elderly people who are admitted at IGMH, who do not have any bystanders to look after them, they are being sent over to the Centre at K. Gurai dhoo. Most of the research studies found that older women are more likely to experience loneliness and isolation than men (Christina Victor, 2001).
1.3: Problem Statement and Justification

Nowadays we see a lot of elderly people alone in the parks made by the government or at the beaches and so. Good quality of life means increase in the percentage of elderly people in the country. It can be seen that the health care system of the Maldives has improved over the years vastly when compared to the 70s. like multispeciality consultants and some of the investigations such as mammography. Moreover with the specialized doctors new surgeries are also being performed in the Maldives. For an example Craniotomy is available in Maldives now. An increase in the percentage of old age people is being witnessed now because of the above mentioned advancements in the health care system.

We see a lot of elderly people near the local market begging despite the pension allowance of MVR.5000 given by the government along with an increase in the increase in the elderly who are being admitted at K. Guraidhoo elderly Centre. these realities point towards the fact that these people are not being given proper care or companionship they need, which in turn leads to depression and loneliness.

1.4: Purpose of the study

To know the factors which leads to loneliness in old age people.
1.5: Objectives of the study

1.5.1: General objective

- To find out common reasons for old age people to become lonely

1.5.2: Specific objectives

- To find out the common views among old age people who are lonely
- To find out whether the elderly person is lonely or not

1.6: Research question

The study was set up to investigate the question: What are the factors that lead to feelings of loneliness among people aged 50-80 living in L. Dhan’bidhoo?

1.7: Significance of this study

This study will give the reasons for the elderly to be lonely. The factors for the elderly people to be lonely will be known so that the beneficiaries can make changes in their existing plans for the elderly people. The findings of this research can benefit the Ministry of Health while making policies for the elderly people. And also the researchers can use this research as a reference and fill the gaps this research may possess.
1.8: Delimitation / Scope of the study

The scope of the study is to investigate the reasons/ factors for the people aged 50-80 to be lonely. The investigation will be carried out using a questionnaire and a certain number of people chosen randomly will be interviewed. The investigation will include knowing whether they have a medical condition which causes them to be lonely.

1.9: Definition of terms

Beneficiary: typically refers to someone who is eligible to receive distributions from a trust, will or life insurance policy

Craniotomy: is the surgical removal of part of the bone from the skull to expose the brain.

Cerebrovascular Accident: A cerebrovascular accident is the medical term for a stroke. A stroke is when blood flow to a part of your brain is stopped either by a blockage or a rupture of a blood vessel.

Gerontology: The scientific study of old age, the process of ageing, and the particular problems of old age people.

Myocardial infarction: It is the medical name for heart attack

Social support: The perception and actuality that one is cared for, has assistance available from other people and that one is part of a supportive social network
Statistical Package for the Social Sciences: SPSS Statistics is a software package used for statistical analysis.
Chapter 2

LITERATURE REVIEW

2.1: Introduction

Loneliness is defined as: “the unpleasant experience that occurs when a person’s network of social relationships is deficient in some important way, either quantitatively or qualitatively” (Loek A. van der Heide, Charles G. Willems, Marieke D. Spreeuwemberg, John Rietman and Luc P. de Witte, 2012). As discussed by (Loek A. van der Heide, Charles G. Willems, Marieke D. Spreeuwemberg, John Rietman and Luc P. de Witte, 2012) loneliness is caused by societal factors and individual factors. Societal factors include loss of employment, income decline and poor education. The individual factors include loss of partner or relationship and long term provision of informal care will have a lot of influence in a person’s social network (Loek A. van der Heide, Charles G. Willems, Marieke D. Spreeuwemberg, John Rietman and Luc P. de Witte, 2012). In some countries an increasing number of older people are being cared for in nursing homes rather than by their adult children. Recent studies have shown that loneliness contributes to alter the
regulation of blood pressure, cortisol levels, sleep patterns (Cacioppo, J.T., Ernst, J.M., Burleson, M.H., McClintock, M.K., Malarkey, W.B., Hawkley, L. et.al., 2002) and silent coronary problems (Sorkin, D., Rook, K. & Lu, J., 2002).

The loneliness is recognized as emotion and includes both physical and psychological conditions such as perceived ill-health, dietary inadequacies, and depression, personality disorders and suicide (Fees, Bronwyn, S., Peter Martin and Leonard W. Poon, 1999). Marital status of the person also has a very vital role in the life of a person. Some factors which will lead towards a lonely life includes death of a spouse, childlessness, social isolation.

In their Social Determinants of Health document, the World Health Organization (2011) cite the positive effects of social support networks in the promotion and maintenance of good health in the individual. This has been supported by various studies that have sought to find methods to explore the alleviation of loneliness. The studies found that focused social activities such as interest groups which not only encourage individuals to increase their participation in activities, but also involve participants in the planning and delivery of the activities—appeared to be more effective than those that provided the use of support IT such as telephone services (Windle G, Hughes D, Linck P et al, 2011). The determinants of
loneliness include age, gender, social support, socioeconomic status, living arrangements and health status of the elderly.

2.1.1: Age

“Although a decline in physical health is common with age, research literature has been inconclusive of regarding the role of age in predicting loneliness among older adults” (Bronwyn S. Fees, Peter Martin and Leonard W. Poon, 1999). But Creecy and colleagues (1985) reported that age had indirect effect on loneliness that was mediated by social activity and social fulfillment. A Denmark longitudinal study once showed that from the ages of 62 to 72, the prevalence rate of loneliness reported increased (Zhen Guo, 2009).

2.1.2: Gender

It is not clear so far whether women or men experience more loneliness (Elston, 1996). Some scholars state that women are more prone to loneliness as they suffer more through widowhood and they share emotions more compared to men. But others state that men report more loneliness compared to women because they do not openly share their emotions to others (Zhen Guo, 2009). There is a gender difference in life expectancy. According to Planning and International Health Division of Maldives, the life expectancy of women is 74.77 and for men is 73.13 (Division, Planning and International health, 2016). So, women are more
likely to spend the life alone after widowhood and post retirement (Monk, 1988).

2.1.3: Social support

Family function plays an important role on loneliness (O. Kim, S. Baik, 2002). “Although a large body of literature indicates that intergenerational coresidence reduces elders’ loneliness, some studies reveal negative effects of coresidence between generations. Lee and Ellithorpe (1982) found that intergenerational exchange and mutual aid from kin had no significant consequence on elders’ psychological well-being” (Zhen Guo, 2009). Types and sources of social support can vary. Cobb (1976) states that the 4 main categories of social support identified are emotional, appraisal, informational and instrumental support (Cobb, 1976).

2.1.4: Living arrangements

Married people who live with the spouse shows less effects of loneliness compared to never married, widowed or divorced men and women (Zhen Guo, 2009). “Unmarried seniors and faced with triple jeopardy: old age, functional limitations and lack of partnership” (Zhen Guo, 2009). People who live in the nursing homes are more susceptible to loneliness than people who live with families (M. Pinquart & S. Sorensen, 2001). “Affection and support both from and for children could alleviate
loneliness, especially with children living at home” (Zhen Guo, 2009). In China, 90.1% of the oldest people live with their children, while 7% lives alone. And also 2.9% lives at institutional care facilities (Zhen Guo, 2009).

2.1.5: Health status

In the four-year follow-up study of Wilson et al. (2007) in the USA older people who were in the top deciles of loneliness scores were 2.1 times more likely to develop Alzheimer's disease compared to those in the bottom deciles (Miyavaki, 2015). “Risk of Alzheimer’s disease was more than doubled in lonely persons compared with persons who were not lonely. Risk of AD was more than doubled in lonely, and controlling for indicators of social isolation did not affect the finding” (Wilson RS, Krueger KR, Arnold SE, Schneider JA, Kelly JF, Barnes LL, Tang Y, Bennett DA., 2007). Physical handicap, mental illness, chronic illness and disability may lead to feelings of loneliness. And also loneliness may lead to mental illnesses and other health conditions such as bodily aches (Zhen Guo, 2009). In all over the world, Depression has become a public health problem, concerning that more people who is diagnosed with the disease are older adults (Oni, 2010).
2.2: Theoretical framework

Of the various models used in health psychology that are used to explain the health behavior, Health Belief Model is the most appropriate in my opinion. The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services. The model was developed in response to the failure of a free tuberculosis (TB) health screening program. Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors (Twente, 2012)

Figure 01 Health belief model
Table 2.1 The definition of the elements in the HBM and how it can be applied

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Susceptibility</td>
<td>One's opinion of chances of getting a condition</td>
<td>Define population(s) at risk, risk levels; personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low.</td>
</tr>
<tr>
<td>Perceived Severity</td>
<td>One's opinion of how serious a condition and its consequences are</td>
<td>Specify consequences of the risk and the condition</td>
</tr>
<tr>
<td>Perceived Benefits</td>
<td>One's belief in the efficacy of the advised action to reduce risk or seriousness of impact</td>
<td>Define action to take; how, where, when; clarify the positive effects to be expected.</td>
</tr>
<tr>
<td>Perceived Barriers</td>
<td>One's opinion of the tangible and psychological costs of the advised action</td>
<td>Identify and reduce barriers through reassurance, incentives, assistance.</td>
</tr>
<tr>
<td>Cues to Action</td>
<td>Strategies to activate &quot;readiness&quot;</td>
<td>Provide how-to information, promote awareness, reminders.</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Confidence in one's ability to take action</td>
<td>Provide training, guidance in performing action.</td>
</tr>
</tbody>
</table>

(Glanz, 1997)
Chapter 3

METHODOLOGY

3.1: Introduction

This chapter of the research will contain the following:

- Research design
- Study Area
- Study Setting
- Target Population
- Sampling Techniques
- Sample Size
- Research instrument
- Pre-Testing
- Validity and Reliability
- Data Collection Techniques
- Data Analysis
- Ethical Considerations
- Conceptual Framework
3.2: Research design

The method of research chosen for this study will be Quantitative method of research. Quantitative research is often an iterative process whereby evidence is evaluated, theories and hypotheses are refined, technical advances are made and so on. Views regarding the role of measurement in quantitative research are somewhat divergent. Measurement is often regarded as being only a means by which observations are expressed numerically to investigate casual relations or associations. However, it has been argued that measurement often plays a more important role in quantitative research. In general, quantitative methods are research methods dealing with numbers and anything that is measurable (Golnessa Galyani Moghaddam, 2008)

The type of quantitative research method used to collect data is descriptive cross sectional study. Cross sectional study is chosen because:

- Cheap and less time consuming.
- Many outcomes and risk factors can be assessed.
- There is no loss to follow-up.
3.3: Study area

The Study will focus on the factors which leads to loneliness in people of age 50-80 living in L. Dhan’bidhoo.

3.3.1: Study setting

The study will be carried out in L. Dhan’bidhoo.

3.4: Target population

The study will be carried out by interviewing people of age 50-80 years, who are living in L. Dhan’bidhoo. The percentage of elderly people who are beyond 65 years is 5% of the population as per the census carried out in the year 2014.

3.5: Sample techniques

There are 2 types of sampling methods. They are probability sampling and non-probability sampling. The sampling method chosen for this study is probability sampling. Random sampling from probability sampling methods is chosen to conduct the study. Random sampling is chosen because each in the target population has an equal chance of being selected to the study. With the help of the island council, the register of
the island was taken and from that the people of age 50-80 were categorized.

3.6: Sample size

The estimated population between the age group 50-80 is 80. The sample size is calculated using Check market sample size calculator. The margin of error was kept at 5%, the estimated response at 50% and the confidence level at 95%. The required sample size is 67.

3.7: Research instrument

The research instrument used is an interviewer administered questionnaire. There are 5 parts in the questionnaire. They are as follows:

1. The Demographic and socioeconomic factors, in this study age and sex is included in the demographic factors and factors like employment status and number of children were asked in the socioeconomic factors.

2. University of California Los Angeles (UCLA) 3 item loneliness scale (Appendix B)

The scale contains 3 questions which are answered by hardly ever, some of the time and never. If the person scores 3-5, he is
listed as ‘not lonely’ and listed as ‘lonely’ if the score is between 6-9 (Anna Goodman, 2011).

3. Social Support Duke Inventory (Appendix B)

This part of the questionnaire is taken from a study called ‘Social support, loneliness and depression in the elderly’ by Oluwabusola Olutoyin Oni. In the study they used 11 questions, but for this study, out of the 11 questions, 7 were chosen.

4. Family APGAR index (Appendix B)

It is used to assess a family member’s perception of family functioning by examining his/her satisfaction with family relationships. The measure consists of five parameters of family functioning:

- Adaptability
- Partnership
- Growth
- Affection
- Resolve

The response options were designed to describe frequency of feeling satisfied with each parameter on a 3-point scale ranging from 0 (hardly ever) to 2 (almost always). Higher scores indicate better family functioning (Zhen-Qiang Wu, 2009).
5. The De-Jong Gierveld Loneliness Scale

The original De-Jong Gierveld loneliness scale has 6 statements. In this study only 5 of the 6 statements were used. 2 statements about emotional loneliness and 3 statements about social loneliness. “Social loneliness occurs when someone is missing a wider social network and emotional loneliness is caused when you miss an intimate relationship” (Campaign to End Loneliness, 2015)

3.8: Pre-testing

The questionnaire was pre-tested before the collection of data. To do so the questionnaire was given to 10 people from the target population mentioned above. The 10 people were selected in random sampling method.

3.9: Validity and reliability

The validity and reliability is given a lot of importance. The questionnaire was discussed with classmates for opinion and suggestions. Questionnaire was discussed with the research Supervisor. Furthermore, the questionnaire was pre-tested. The data from the pre-test is not used in the data analysis. The pre-tested questionnaires were used to make the questionnaire stronger.
3.10: Data collection techniques

There are 2 types of data collection.

- **Primary Data Collection:** The primary data collection technique is the questionnaire which will be used to collect the data. The questionnaire will be interviewer administered. Interviewer administered over self-administered was chosen because some had difficulty in writing due to their medical conditions (the medical conditions include trembling of hands due to CVA, DM, eye condition and paralysis etc)

- **Secondary Data Collection:** the secondary data will be collected using online journals, EBSCOHOST research database and hinari, google

The questionnaire was translated to Dhivehi language before the data collection. The field data collection was carried out using 1 assistant. She was trained for 1 day about the purpose and objectives of the study. Moreover the questionnaire was also taught to her on how to elaborate the questions if any respondent asks.
3.11: Data Analysis

Statistic Package for the Social Sciences (SPSS) software is used to analyze the data. The data is analyzed using mean, percentage and frequency. The data are described in charts and tables.

3.12: Ethical consideration

The participants were given information on the research project and the purpose of it. Informed consent was taken prior to that. Confidentiality and anonymity was given to all the participants of the research. The participants were not forced to participate or to keep going on with the research if he/she wanted to withdraw from the research.

3.13: Conceptual framework and measurement of variables

The conceptual framework for the study is drawn by using the HBM. Perceived Severity and Perceived Susceptibility were used. Perceived Susceptibility is one's opinion of chances of getting a condition. Perceived Severity is one's opinion of how serious a condition and its consequences are. The research question is ‘What are the factors that lead to feelings of loneliness among elderly living in L. Dhanbidhoo’? The independent variable from the question is the feelings of loneliness and the dependent variable is the factors which leads to the feeling.
In perceived susceptibility people somewhat knows the reasons for elderly people to be lonely but still do not care enough to look after them with all the resources they have. They are too busy in their own life and thinks that if they bring their parent home and make them stay it will affect their independent life. In Perceived Severity they know that the loneliness of the elderly will cause problems in the elderly people life.
Chapter 4

RESULTS

4.1: Demographic data

4.1.1: Age

Table 0.1 The mean, median, maximum and minimum of age

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-59</td>
<td>43</td>
<td>64.2</td>
</tr>
<tr>
<td>60-69</td>
<td>13</td>
<td>19.4</td>
</tr>
<tr>
<td>70-79</td>
<td>10</td>
<td>14.9</td>
</tr>
<tr>
<td>80-89</td>
<td>1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

The table 0.1 shows that the mean age group is 59.61 and the median is 57. The minimum age is 50 and the maximum age is 80.

Table 0.2 The frequency and percentage of the age groups

The table 0.2 illustrates that the highest frequency of participants are between the ages 50-59. The percentage is 64.2. 60-69 years of age had 13 participants and the percentage is 19.4. There were 10 participants in
the age group 70-79 which is 14.9%. Lastly there is one participant from the age group 80-89, and the percentage is 1.5.
4.1.2: Sex

Table 04.3 The respective sex of the participants

<table>
<thead>
<tr>
<th></th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>32</td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
</tr>
</tbody>
</table>

Table 4.3 shows the number of participants are 67, out of which 32 are males and 35 are females. Random sampling was used to choose the participants for the study.

4.2: Socioeconomic status

4.2.1: Marital status

![Marital Status Pie Chart]

Figure 4.1 The percentage of people compared to their marital status
The figure 4.1 illustrates that 79% of people who participated in the study are married. 4% are divorced and 15% were widowed. Furthermore 2% of the people who participated in the study are single.
4.2.2: Employment

Figure 04.02 The frequency of the employment

The figure 4.2 shows that 29 people out of the 67 people do not do any job. Fishing is done by most of the people and then agriculture. There are 5 government employees, 3 people who do retail and wholesale business, and 2 people who chose carpentry as their employment. Only 1 participant does the following job; sea cucumber farming, construction, dhoani captain, hotel chef, hotel waiter, blacksmith, Imaam, technician and sweeping of the roads.

Table 4.4 The employment status by age groups

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Age group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50-59</td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
</tr>
</tbody>
</table>

The table 4.4 illustrates that 29 people from age group 50-59 are working and 14 are unemployed. 7 people are working from age group 60-69 and
6 are unemployed. Moreover in age group 70-79, 2 people are employed and 8 are unemployed. 80-89 age group has 1 person and he is unemployed.

4.2.3: Children

Table 4.5 The number of children the participants in each age group have

<table>
<thead>
<tr>
<th>Number of children</th>
<th>Age</th>
<th>50-59</th>
<th>60-69</th>
<th>70-79</th>
<th>80-89</th>
</tr>
</thead>
<tbody>
<tr>
<td>three</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<td>1</td>
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<tr>
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<td>2</td>
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<tr>
<td>Nine</td>
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<td>1</td>
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<td>0</td>
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<tr>
<td>Ten</td>
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<td>1</td>
<td>1</td>
<td>0</td>
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</tr>
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<td>eleven</td>
<td>1</td>
<td>1</td>
<td>0</td>
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</tr>
</tbody>
</table>

The table 4.5 illustrates the number of children each age group has. From the age group 50-59 years, 1 person has 3 children, 6 person has 4 children, 13 person has 5 children, 11 person has 6 children, 7 person has 7 children and it goes on.

Table 4.6 The number of children living in the island

<table>
<thead>
<tr>
<th>Number of children living in the island</th>
<th>Age</th>
<th>50-59</th>
<th>60-69</th>
<th>70-79</th>
<th>80-89</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>5</td>
<td>0</td>
<td>1</td>
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</tr>
<tr>
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<td>12</td>
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<td></td>
</tr>
<tr>
<td>three</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Four</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
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<tr>
<td>Five</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Six</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>seven</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>eight</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
The table 4.6 shows the number of children living in the island. From the age group 50-59, 1 child of 5 people live in the island, 2 children of 12 people live in the island, 3 children of 6 people live in the island and so on.

```
<table>
<thead>
<tr>
<th>Immediate Family</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Kids</td>
<td>15</td>
</tr>
<tr>
<td>On Their Own</td>
<td>1</td>
</tr>
</tbody>
</table>
```

Figure 04.3 The frequency and who they stays with

The figure 4.3 shows that 51 people live with their immediate family and 15 of them living with their kids. 1 person live on their own.
4.2.4: Chronic illness

Figure 04.4 The frequency of chronic illnesses

The figure 4.4 illustrates the chronic illnesses and the frequency of each illness. 22 people have hypertension, 10 are having higher cholesterol levels and 6 people have diabetes mellitus. 4 people have heart disease and thyroid disease respectively. There are 2 kidney disease patients, 2 hepatitis B patients and 2 paralysis patients. 1 person had a cerebrovascular accident and 1 have bronchial asthma.
4.2.5: Spare time activity

Figure 04.5 The frequencies and activities done on free time

The figure 4.5 shows the activities and the frequencies of the activities done. Most people do agriculture and go into the woods in search of coconuts. The next activity which is done mostly is walking and praying.
4.2.6: How often do they meet with their friends?

Figure 04.6 The percentage of how often they meet with their friends.

The figure 4.6 shows that 63% of the participants meet their friends often, while 24% meet their friends rarely. Furthermore, 13% of the people who participated in the study sometimes meet their friends.
4.2.7: How often do they go out?

Figure 04.7 The percentage of people who go out often and do not go out often

The figure 4.7 shows that 63% of the participants go out often while remaining 37% do not go out often.
4.3: UCLA Loneliness scale

Table 4.7 The score each participant scored in UCLA loneliness scale

<table>
<thead>
<tr>
<th>Participant</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>4</td>
</tr>
<tr>
<td>Participant 2</td>
<td>4</td>
</tr>
<tr>
<td>Participant 3</td>
<td>6</td>
</tr>
<tr>
<td>Participant 4</td>
<td>3</td>
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<tr>
<td>Participant 5</td>
<td>7</td>
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<td>Participant 6</td>
<td>3</td>
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<td>Participant 7</td>
<td>7</td>
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<td>Participant 8</td>
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<td>Participant 9</td>
<td>3</td>
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<td>Participant 10</td>
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<td>Participant 11</td>
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<td>Participant 12</td>
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<td>Participant 16</td>
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<td>Participant 18</td>
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<td>Participant 20</td>
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<td>Participant 22</td>
<td>9</td>
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<td>Participant 23</td>
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<td>Participant 24</td>
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<td>Participant 27</td>
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<td>Participant 33</td>
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<td>Participant 34</td>
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<td>Participant 38</td>
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<td>Participant 66</td>
<td>3</td>
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<tr>
<td>Participant 67</td>
<td>3</td>
</tr>
</tbody>
</table>
The table 4.7 shows the scores participants scored in UCLA loneliness scale. Based on the above results the number of people who feel lonely is 12 and the rest which is 55 do not feel lonely. If the person scores 3-5, then he is classified as not lonely. But if the person scores 6-9, then he is classified as lonely. The number of females who are lonely is 10 and number of males are 2.

4.4 Social support Duke inventory

![Bar chart](chart.png)

**Figure 04.8** The percentage of people satisfied that they can count on at least some of their family in times of trouble

The figure 4.8 illustrates that most of the time 68.7% people are satisfied that they can count on at least some of their family in times of trouble. Hardly ever 19.4% are satisfied and 10.4% satisfied some of the time that they can count on their family in troubling times. 1.5% did not give the answer to the statement.
Figure 04.9 The percentage of people who wish that their family would give them more help

The figure 4.9 illustrates that 61% of people wish that their family would give them more help while 37% do not wish that. 2% of people did not give their answer to this statement.

Figure 04.10 The frequency of people who feels lonely when they are with their family
The figure 4.10 describes that 45 people hardly ever feels lonely when they are with their family. 11 people feels lonely some of the time and 11 people feels lonely most of the time when they are with their family.

Figure 04.11 The percentage of people who thinks that their family understands them

The figure 4.11 tells that, most of the time 58% people understands them.

Some of the time 25% people feels that their family understands them and 14% people thinks that their family hardly ever understands them. 3% people did not give the answer to the question.
Figure 04.012 The frequency of people who think that they are useful to their family

The figure 4.12 shows that 60 people most of the time feel that they are useful to their family. Some of the time 5 people think that they are useful, and 2 people hardly ever think that they are useful to their family.

Figure 04.13 The frequency of people who think that they have a definite role in their family
The figure 4.13 illustrates that most of the time 51 people thinks that they have a definite role in their family. Some of the time 8 people thinks that they have a definite role in their family and hardly ever 8 people thinks the same.

The figure 4.14 shows that most of the time 51% people thinks that they can talk about their deepest problems with at least one of their family member while some of the time 13% people thinks the same. Furthermore 33% hardly ever feels that they can talk about their deepest problems with at least one of their family member.
4.5: Family APGAR index

Table 4.8 The family APGAR score of participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Score</th>
<th>Participant</th>
<th>Score</th>
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<td>Participant 11</td>
<td>10</td>
<td>Participant 45</td>
<td>10</td>
</tr>
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<td>Participant 12</td>
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<td>10</td>
<td>Participant 67</td>
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</tr>
<tr>
<td>Participant 34</td>
<td>8</td>
<td>Participant 50</td>
<td>10</td>
</tr>
</tbody>
</table>

The table 4.8 shows the family APGAR scores of participants of this study. If the score is 0-3, then the family is considered dysfunctional. Is
the score is 4-7, then it is mildly dysfunctional and if the score is 8-10, then the family is considered highly functional. When the results were analyzed, 48 participants received a highly functional score of family APGAR index. 11 participants received mildly dysfunctional while 8 of them classified as dysfunctional.

4.6: The De Jong Gierveld loneliness scale

Figure 04.15 frequency of people who experiences a general sense of emptiness

The figure 4.15 illustrate that most of the people sometimes experience a great sense of emptiness. 22 people feels a general sense of emptiness while 3 people do not feel any emptiness in their life. 2 people did not give the answer to the question.
Figure 04.016 The percentage of people who thinks there are plenty of people who they can rely on when they have problems.

The figure 4.16 illustrates that 79% people thinks that there are plenty of people who they can rely on when they have problems. But 3% says that there are few people that they can rely on. 18% people tells that sometimes there are plenty of people who they can rely when they have problems.
Figure 04.17 The frequency of people who thinks that there are many people that they can trust completely

The figure 4.17 shows that 56 people thinks that there are many people they can trust completely and 10 people thinks that there are few people that they can trust completely.

Figure 04.018 the percentage of people who miss having people around them
The figure 4.18 shows that 70% people miss having people around them and 8% do not miss having people around them. 22% people sometimes miss having people around them.

Figure 04.19 The frequency of people who thinks that there are enough people they feel close to

The figure 4.19 shows that 64 people thinks that there are enough people they feel close to while 3 people think otherwise.
5.1: Discussion

The question of this research is ‘what are the factors that lead to feelings of loneliness among people aged 50-80 in L. Dhan’bidhoo?’ The research design chosen is quantitative study. In this study the relationship between loneliness and factors which might lead to loneliness were studied in 67 individuals. In agreement with the literature by Zhen Guo (2009), the findings demonstrate that women are more lonely compared to men. By calculating the loneliness using the UCLA loneliness scale, 10 women and 2 men showed loneliness with the answers they provided while being surveyed. Furthermore in the study by Oluwabusola Olutoyin Oni also suggests that women are more prone to loneliness than men (Oni, 2010). Hom Nath Chalise (2014) also have stated in his study that loneliness is significantly high in Nepalese elderly women compared to men (Hom Nath Chalise, 2014). It might have happened because of widowhood and lack of social support. Moreover there financial status was not taken into account but due to financial status also people tend to get distracted from
the social life. As L. Dhan’bidhoo men mostly go for fishing as an employment, it might also cause the loneliness in women.

From the literature written by Kheraj, Meenaxy, Antushree Punia and Jitendra Sigh Bika (2015), married people had a 12% loneliness rate and widowed people had 55.9% and separated and divorced had 100% (Kheraj, Meenaxy, Antushree Punia & Jitendra Singh Bika, 2015). But the findings of this research shows otherwise. The research suggests that married people are more lonely compared to divorced and widowed people. A total of 12 people were considered to be lonely after measuring the UCLA loneliness scale. Out of the 12 people, 8 are married, 3 are divorced and 1 is widowed. The highest degree of loneliness is shown by married people.

“Gerontological research has consistently documented the importance of support from family and friends in providing social and instrumental support for older persons” (Oni, 2010). The present findings of family APGAR index showed that 48 people out of the 67 are highly functional with the family surroundings they are provided with. 11 participants believed that their family is mildly dysfunctional and 8 said that theirs is dysfunctional. The reasons for people to feel that their family is dysfunctional might include a busy schedule as they have to provide for the family as well. And also coping with the financial crisis and leading a
stressful life is hard enough for the head of the family. When the people lead a stressful life, they don’t like to talk about the problems with their parents. Mostly what happens is that the medical conditions also do not give the space to talk about their problems with their parents.

Zhen Guo has stated in his research that chronic diseases may result in loneliness. Moreover he also stated that physical immobility leads to loneliness. It may happen because of lack of outside contact and outside activities (Zhen Guo, 2009). Hypertension unless treated well can lead to myocardial infarctions and cerebrovascular accidents. The incidence rate of hypertension in this study is higher compared to other diseases. Diseases like paralysis and cerebrovascular accidents causes immobility of the patients. When the patient is immobilized, the social circle of the patient gets smaller day by day as the people who visits to him become less and less by each passing day. When such things happen they start the feeling of loneliness hits them. As Zhen Guo stated that loneliness causes mental illnesses, mental illnesses cause self harm and harm to others (Mayo Clinic, 2016). Angelic Chan, Prassana Raman, Stefan Ma and Rahul Malhotra states that “loneliness was associated with an increased risk of mortality, but living arrangements and social networks outside the household were not, once health status indicators were accounted for” (Angelique Chan, Prassana Raman, Stefan Ma & Rahul Malhotra, 2015).
5.2: Limitations of the study

As there are limitations in every research, it is possible that this research may have the following limitations:

- Lack of time
- Not enough support from the respondents
- The answers may be partially true

5.3: Conclusion

“Loneliness is an emerging public health concern across Western and non-Western cultures. With increase in life expectancy, family care is being extended over time and is no longer confined to the physical and financial domains” (Angelique Chan, Prassana Raman, Stefan Ma & Rahul Malhotra, 2015). In conclusion, the study reveals that loneliness is more in people who are married rather than people who are widowed and divorced or separated. More women are becoming lonely compared to men. If the underlying causes for loneliness are being treated, then the negative impacts of loneliness like mental health illnesses will not be evolving (mental illnesses due to loneliness will not be evolving). As there is no such study done in Laamu atoll, this study can be used to make the lives of the elderly better. The culture and livelihood of people in the same atoll will be similar.
REFERENCE


APPENDIX A

Consent form - English

This is a voluntary survey which will be used to determine the reasons for elderly people aged between 50-80 years for being lonely. I am doing Bachelor’s in Primary Health Care at Faculty of Health Sciences, Maldives National University. This is a part of my research Old age loneliness in L. Dhan’bidhoo: Reasons for being lonely. By taking part in this research you will not be harmed in any way.

Purpose

The purpose of this survey is to investigate the reasons for elderly people aged between 50-80 years to be lonely

Confidentiality

All the information that is shared will be confidential and anonymity will be maintained. Personal information will not be revealed to anyone. You are free to withdraw at any moment as you please. You will not be forced to finish the questions after you start.

DECLARATION BY THE PARTICIPANT: I give my consent to participate in this survey and I have read the above mentioned things as well.
PARTICIPANT

NAME……………………………………

SIGNATURE…………………………

DATE……………………………………

RESEARCHER

NAME…………………………………

SIGNATURE…………………………

DATE…………………………...
APPENDIX B

Questionnaire - English

Part 1

- Demographic factor
  - Age:
  - Gender: Male  Female

- Socioeconomic status
  - Marital status:
    - Single, that is never married
    - Married
    - Divorced
    - Widowed
  - Employment (if doing any work to earn money):
  - Number of Children:
  - How many children live at the island?
  - Whom are you staying with?
  - Any chronic illness?
  - What do you do in your spare time?
  - How often do you meet with your friends?
  - Do you go out often?

Part 2 - UCLA Loneliness scale

1. How often do you feel that you lack companionship?
   a) Never
   b) Sometimes
   c) Often

2. How often do you feel left out?
   a) Never
   b) Sometimes
   c) Often
3. How often do you feel isolated from others?
   a) Never
   b) Sometimes
   c) Often

Part 3 - Social Support Duke Inventory (modified for the study)

1. In times of trouble, can you count on at least some of your family?
   a) Hardly ever
   b) Some of the time
   c) Most of the time

2. Do you wish that your family would give you more help?
   a) Yes
   b) No

3. When you are with your family how often do you feel lonely?
   a) Most of the time
   b) Some of the time
   c) Hardly ever

4. Does it seem that your family understand you?
   a) Hardly ever
   b) Some of the time
   c) Most of the time

5. Do you feel useful to your family?
   a) Hardly ever
   b) Some of the time
   c) Most of the time

6. Do you feel that you have a definite role in your family?
   a) Hardly ever
   b) Some of the time
   c) Most of the time

7. Can you talk about your deepest problems with at least one of your family member?
   a) Hardly ever
   b) Some of the time
   c) Most of the time
Part 4 - Family APGAR index

1. I am satisfied that I can turn to my family for help when something is troubling me.
   a) Almost always
   b) Some of the time
   c) Hardly ever

2. I am satisfied with the way my family talks over things with me and shares problems with me.
   a) Almost always
   b) Some of the time
   c) Hardly ever

3. I am satisfied that my family accepts and supports my wishes to take on new activities or directions
   a) Almost always
   b) Some of the time
   c) Hardly ever

4. I am satisfied with the way my family expresses affection and responds to my emotions, such as anger, sorrow and love.
   a) Almost always
   b) Some of the time
   c) Hardly ever

5. I am satisfied with the way my family and I share time together.
   a) Almost always
   b) Some of the time
   c) Hardly ever
Part 5 - The De Jong Gierveld Loneliness scale (modified for the study)

1. I experience a general sense of emptiness
   a) Yes
   b) Sometimes
   c) No

2. There are plenty of people I can rely on when I have problems
   a) Yes
   b) Sometimes
   c) No

3. There are many people I can trust completely
   a) Yes
   b) No

4. I miss having people around me
   a) Yes
   b) Sometimes
   c) No

5. There are enough people I feel close to
   a) Yes
   b) No
APPENDIX C

Questionnaire – Dhivehi

1. ......................................................

2. ......................................................

3. ......................................................

4. ......................................................

5. ......................................................

6. ......................................................

7. ......................................................
14. कौन-सा स्त्रोत सर्वाधिक रुपये कमाता है?

- [ ] एक मोबाइल फोन
- [ ] एक लैपटॉप
- [ ] एक टीवी
- [ ] एक कंप्यूटर

15. स्त्रोत का उपयोग किए जाते हैं?

- [ ] शिक्षा
- [ ] सन्तान रोकथाम
- [ ] स्वास्थ्य
- [ ] ऊर्जा योजना

16. स्त्रोत का सेवन किया जाता है?

- [ ] खांसी सेवन
- [ ] दान
- [ ] निर्माण
- [ ] वित्तीय सेवा

17. निर्माण का सार्वजनिक हित क्षेत्र है?

- [ ] स्वास्थ्य
- [ ] शिक्षा
- [ ] वातावरण
- [ ] उद्योग
26. दुसर्या नामक श्रेष्ठता बांधकामकर्ता को समाधान देवाव? असे काम करण्यासाठी तिथि काही लागू होत नाही. 

27. ही कार्यालयात फाउडे सुगमती कसे करावे? असे कार्यालयातल्या फार्मल्स नियमाने करण्यासाठी प्राप्ती कसे करावे? 

28. विशेष काय साधन वापरावे कसे कमावण्यासाठी कसे करावे? असे प्रश्नावरुन कार्यालयातल्या सात्त्विक फार्मल्स वापरण्यासाठी कसे करावे? 

29. अन्य कार्यालयातल्या साधन वापरावे कसे करावे कसे करावे?
APPENDIX D

Dhivehi Consent Form

ދިރާސާގެ ބައިވެރިން ދެވޭ އިރުޝާދުތައް ދިރާސާ ކުރިއަށް ގެންދާ ފަރާތް އަދި ހަރުގެ މާއްދާއެއްގެ ގޮތުގައި ހިމެނޭ 'ރިސާރޗް ފޯރ ހެލްތް' ފުރިހަމަ ކުރުމަށްޓަކައި ހަދާ ދިރާސާއެއް ކަމުގައިވާ 'ދުވަސްވީ މީހުންނަށް ދިމާވާ ސަބަބުތައް ދެނެގަތުން' ބެލުމަށްޓަކައި ތިޔަ ބޭފުޅާގެ ފުރިހަމަ އަދި ހަމަ އެހެންމެ، ސުވާލަކަށް ޖަވާބު ނުދިނު މުގެ ފުރިހަމަ އިޙްތިޔާރުވެސް ލިބިގެންވެއެވެ. މިދިރާސާބިއް ބެހޭގޮތުން ސުވާލު ކަރުދާސް ނި މުމަށްފަހުގައި ވެސް ދިރާސާ ނިމުމުގެ ކުރިން ދިރާސާ ކުރިއަށް ގެންދާ ކޮންމެ ހިސާބަކުން ވެސް ދިރާސާއިން ވަކިވުމުގެ ފުރިހަމަ އިޙްތިޔާރު ތިޔަބޭފުޅާއަށް ލިބިގެންވެއެވެ. މިދިރާސާގައި ފުރިހަމަ ކުރާ ސުވާލު ކަރުދާހުގައިވާ މައުލޫމާތުތަކުގެ ސިއްރު ހި�ެހެއްޓޭނެއެވެ. މި ދިރާސާއާއި ބެހޭގޮތުން ސުވާލު ކަރުދާހުގައިވާ މައުލޫމާތެއް ނުހިމަނާނަމެވެ. މި ދިރާސާއާއި ބެހޭގޮތުން ސުވާލު ކަރުދާހުގައިވާ މައުލޫމާތެއް އެސުވާ ރުދާސް ނިމުމުގެ ކުރިން ދިރާސާ ކުރިއަށް ގެންދާ ކޮންމެ ހިސާބަކުން ވެސް ދިރާސާއިން ވަކިވުމުގެ ފުރިހަމަ އިޙްތިޔާރު ތިޔަބޭފުޅާއަށް ލިބިގެންވެއެވެ.

ދިރާސާގެ ބައިވެރިން ఆިދ నބިއް ބައިވެރިން ވިއަޞްސިރު ހިރުހަމަ ހަދާ ދިރާސާއެއް ވިރުޝާދުތައް. ވިރުދާސް ނި ރުދާސް ނިމުމުގެ ކުރިން ދިރާސާ ކުރިއަށް ގެންދާ ކޮންމެ ހިސާބަކުން ވެސް ދިރާސާއިން ވަކިވުމުގެ ފުރިހަމަ އިޙްތިޔާރު ތިޔަބޭފުޅާއަށް ލިބިގެންވެއެވެ.
## Budget

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<th>DETAILS</th>
<th>ESTIMATED BUDGET (MVR)</th>
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<td>MVR 954 / fair ticket</td>
<td>2354</td>
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<td>MVR 1400 / non-fair ticket</td>
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<td>MVR 23 / ticket</td>
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<td>MVR 150 / one way</td>
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<td>1 packet of cello gripper blue pen</td>
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## APPENDIX F

### Work plan

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<td>Collecting Data</td>
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<td>Analyzing the data</td>
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<td>Making the report</td>
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