

## FACTORS INFLUENCING THE PURCHASE INTENTION OF HEALTH INSURANCE IN KOTA KINABALU SABAH

**Violeta Wilfred**

Asia Graduate School of Business, UNITAR International University,  
Petaling Jaya, Selangor, Malaysia

\*Corresponding author's email:  
caroline@ums.edu.my

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### ABSTRACT

Health and life insurance have been very critical issue in today's world. Insurance has become a major necessity for everyone to have in order to protect them or their family from any unforeseen circumstances in life. This study is done to find out what is the factors that influencing the purchase of health and life insurance to the public as well as to determine the relationship among these variables. This descriptive and quantitative study uses 200 respondents selected using a random sampling method from clients of CIMB Bank Branches around Kota Kinabalu, Sabah. IBM SPSS 23.0 was used to analyse data gathered from a self-administered questionnaire. Findings showed that the intention to purchase was perceived moderately. This study also showed that income level, knowledge level, income protection, risk attitude and social factors are significantly, positively and strongly related to purchase intention of life and health insurance.

### INTRODUCTION

#### *Background of the Study*

The factors that influencing the purchase of health insurance has experienced a rapid growth lately. The reasons for the growth are tremendously rising due to the awareness of the public on the cost of medical expenses that is also rising. There has been more attention given to the factors influencing health

insurance purchase in the aftermath of the World War II as it is relevant in the economic development of the global market. In the last five decades, there have been many studies that attempt to determine what factors drive the people's intention to buy health insurance. This is because health insurance purchase is considered as one of most significant decisions in consumer purchase. For instance, consumers in the United States spent more than \$24 billion to purchase health insurance premiums which is a little over three per cent of their total disposable personal income. It is from these premium receipts and the earned investment income that has contributed to making the life insurance industry as one of the most prevailing financial institutions, with a control of more than \$240 billion in terms of assets. It is evidence that health insurance is incrementally a crucial part of the financial sector over the past four decades, with the provision of various financial services to its consumers. It has also become a main source of investment in the capital market. Thus, life insurance firms are key players in the financial sector.

There are several important financial services provided by health insurance to the individuals and the economy at large. First, health insurance products promote individuals to save for long-term basis and it also enables the reinvestment of substantial amount in public sector projects as well as projects in the private sector. Health insurance serves by leveraging as financial intermediaries, and thus, is considered as the main source of long-term finance and contributing to the capital market development. Additionally, health insurance has also become a means to manage income risks. Due to the obvious significance of the role of health insurance to support economic and financial development, there has been more interests to determine which factors relating to demographics, institutions and economic that could lead to a pulsating health insurance market. Studies in the past have indicated a core set of socio-economic factors that can predict health insurance consumption. Nevertheless, due to the availability of limited data samples

as well as varied measures of consumption that were used in these studies, their scope was limited and not able to be generalized based on their findings.

### **PROBLEM STATEMENT**

Theoretically, the purchase of health insurance is determined by many factors. The increase in the popularity of health insurance for instance, can be related to the development in market structure. As the domestic markets become more open to foreign competition due to the emergence of the international trade agreement, products and services are competitively priced and more attractive as well as tailored to consumer demands. In addition, the notion of financial saving from a retirement viewpoint has also promoted more demand of health insurance in the fast aging population. Furthermore, the development of financial savings in a retirement perspective is seen to bolster health insurance demand in rapidly aging economies.

According to Li, Moshirian, Nguyen, and Wee (2007), there exists two types of foreign direct investment factors. The first one comprises of traditional economic determinants which include income level, number of dependents, education level and life expectancy. The second one is more associated with the socio-cultural environment of the host country such as income expectancy. In past studies that identify the determinants for purchase of medical insurance, it was found that different countries have diverse determinants and their effects were also dissimilar from one country to another.

Li et al. (2007) found that both psychographic and demographic factors were related to ownership of medical insurance. These factors include religion and work ethic, as well as levels of income and education. It was also found that financial market conditions and performance of alternative investments were significantly responsible for short-term demand. Health insurance products have often

been presented as an investment product which offer health insurance benefits that it is considered as a substitute for traditional financial assets such as bond and equity.

This study focuses on investigating the determinants of health insurance. Five factors were identified which are: income level, knowledge level, income protection, risk attitude and social factors as determinants of consumers' intention to purchase life insurance.

### RESEARCH QUESTIONS

The research questions are as follow:

- (a) Is there any significant relationship between income level and the intention to purchase life insurance?
- (b) Is there any significant relationship between knowledge level and the intention to purchase health insurance?
- (c) Is there any significant relationship between income protections with the intention to purchase health insurance?
- (d) Is there any significant relationship between risk attitude and the intention to purchase health insurance?
- (e) Is there any significant relationship between social factors and the intention to purchase life insurance?

### RESEARCH OBJECTIVES

The research objectives are:

- (a) To determine the relationship between income level and the intention to purchase health insurance;
- (b) To determine the relationship between knowledge level and the intention to purchase health insurance;
- (c) To determine the relationship between income protection and the intention to purchase health insurance;
- (d) To determine the relationship between risk attitude and the intention to purchase health insurance; and
- (e) To determine the relationship between social factors and the intention to purchase health insurance.

## LITERATURE REVIEW

### *Conceptual Definition of Life Insurance*

Insurance is regarded as a product that is offered to people and industries as a security against certain eventualities (Mohamad Idham, Siti Hawa, Raihan, Paramasivam & De Mello, 2014). It is also a protection of assets and livelihood. According to Fidelity Investment (2013), a life insurance policy connotes a contract with an insurer. The policy holder is obliged to pay a premium to the insurer and in return, the insurer will provide a substantial amount of payment to the beneficiaries in the even of the life assured death or when there is total permanent disability (Goh, 2015). Therefore, life insurance is a means of providing income protection to the dependants of the insured upon the death or total permanent disability of the life insured (Mohamad Idham et al., 2014). It replaces the lost income and cover the expenses of the dependent family when the main contributor of the household income is no longer able to provide an income. The payment from the life insurance to the beneficiaries also covers expenses such as medical bills, funeral costs, legal fees, or taxes that need to be paid when death occurs. Therefore, life insurance serves as a key component of financial planning for individuals, families and dependents (Life Insurance Quotes, 2014).

### *The Insurance Industry in Malaysia*

The insurance industry in Malaysia started a long time ago during the colonial period of the 18<sup>th</sup> and 19<sup>th</sup> centuries. During those times, the British trading firms or agency house had anchored their business here, acting as the insurance agents for companies in the United Kingdom such as Boustead and Harrison & Cross (Affaine & Zalina, 2008). The trend of the insurance industry in Malaysia is defined by the British System. Initially, in 1955, the local insurance market was monopolized by foreign insurance firms. After gaining independence in 1957, there was a rise in the number of domestic insurance firms. The growth in this

industry was monitored under the Ministry of Finance and covered by the Insurance Act 1963 (later replaced by the Insurance Act 1996). The Insurance Act 1996 was enforced on January 1<sup>st</sup>, 1997 with improved supervision and regulation of the protection of the policy owners, the operational and financial discipline and policies' transparency.

To measure the demand on life insurance, Hwang and Geenford (2005) proposed the use of per capita premium expenditure which was agreed by Browne and Kim (1993). However, there are some arguments on the use of premium income to represent health insurance consumption because premiums refer to the total revenues equal to the price multiply output (Cummins, Tennyson, & Weiss, 1999; Yuengert, 1993). In exchange, benefits paid to policyholders can be used as an alternative to measure of health insurance demand.

The demand for health insurance is a key factor of the health care financing system, particularly in developing countries (Pauly, Zweifel, Scheffler, Prekar & Bassett, 2006). In Malaysia, the life insurance industry showed a positive growth of 6.2% higher in insurance coverage for Malaysians in 2015 and a total of RM1.24 trillion in sum assured of all types of policies compared to only RM1.17 trillion in 2014. This reflects the growing awareness among Malaysians about the importance of life insurance protection. In 2015, the life insurance industry ensured insurance protection to 12.5 million lives with a per capita sum assured of RM39,929 (Life Insurance Association of Malaysia, 2017).

### *Theoretical Concepts of Purchase Intention of Life and Health Insurance*

Purchase intention is defined as the probability of making a purchase in association to intention to actually buy or own the product (Chimedtseren & Safari, 2016). A definition by Lawong and Jaroenwanit, (2013) relates purchase intention as the individual's intention to buy his first product or service choice.

Nyman (2014) explained that there are two main theories to explain the concept of health insurance demand that demand on health insurance can be explained by two theories. First, based on the conventional theory, it explains that health insurance purchase by individuals is the result of their preference to lose a certain amount rather than an uncertain one with the same expected magnitude. The second theory is an alternative viewpoint that regards health insurance purchase due to the desire of the consumer to transfer his income when illness strikes.

### *Influencing Factors of Intention to Purchase Health and Life Insurance*

There are six factors that can influence the consumers' intention to purchase health and life insurance. These factors are discussed as follow:

#### *Income Level*

Employee's salary can determine one's intention to purchase health insurance. There are two types of employees: the blue-collar and the white-collar ones. White-collar employees normally earn a higher salary from a blue-collar employee and therefore may have greater intention to purchase health insurance. Past studies such as Burnett and Palmer (2004) supported this notion. Pliska and Ye (2007) also shared the same viewpoint who stated that the wealth of the wage earner significantly affects the decision to purchase health insurance. Wang and Rosenman (2007) also showed that there is direct impact of income on the demand for health insurance.

It is also argued that white-collar employees have a stable job and fixed income but for blue-collar workers, their income is paid based on hours, thus, their future income is quite uncertain. Their inability to work for a particular period of time will result in a lower income which is unlike the white-collar employees who have paid medical leave if they are sick. Therefore, the white-collar workers are

more capable to purchase health insurance. According to Liu, Gao and Rizzo (2011), there are differences in the health insurance package and coverage levels across nations, and that the level of income also varies. The standards of health insurance coverage may differ from one country to another but mostly, it covers the cost of in-patient care while out-patient care may be covered, partially covered or none at all. This may contribute to the reluctance of the low-income earners to purchase health insurance as it does not cover all types of medical expenses.

Wang and Rosenman (2007) also suggested that those from the rural areas are less inclined to purchase health insurance compared to those from the urban areas. There are lesser job opportunities in the rural areas and lower income compare to urban workers. In the rural workers' mindset, purchase of health insurance is a luxury as it is costly to purchase one. They may also be ignorant of the importance of health insurance. On the other hand, those in the urban areas may earn a higher income and they are more open to purchase health insurance because they are aware of its benefits as a protection for their future. In another study, Saliba and Ventelou (2007) also showed the relationship between income and demand for health insurance. High income wage earners are more likely to purchase health insurance to ensure protection compared to low income earners.

#### *Knowledge on Health Insurance*

Non-buyers of health insurance may be due to their lack of knowledge about the need to have health insurance coverage (Deloitte, 2011). The Prudential Research from year 2012 to 2013 found that because of low level of knowledge, the consumers were less confident of meeting their financial goals and less wise to purchase insurance for future benefit. They require some professional advices before they can make a strong decision to purchase health insurance (Life Insurance Association, 2011). According to Sarwar and Qureshi

(2013), one of the most significant barriers of health insurance purchasing decision is due to the lack of insurance knowledge. Bhat and Jain (2006) stressed the importance of building more awareness among consumers on health insurance as this will increase the possibility of purchasing health insurance. Salthouse (2002) stated that education directly influences one's knowledge about health insurance. Ioncica, Petrescu, Ioncica & Constantinescu (2012) stated that a person who is more educated is more likely to buy health insurance. They know that ownership of health insurance means better access to health care, higher security for their material possessions such as cars, house, jewellery and others. The higher the level of education and insurance knowledge, the greater the possibility of owning a private insurance.

#### *Income Protection*

Income protection in relation to life insurance is known as a bequest. It is a situation where one leaves their wealth to identified heirs so that they can enjoy the inherited wealth. The largest the bequest leaves to heirs, the easier it would be for the heirs to live in their future life. In past studies such as Lewis (1989) and Berheim (1991), the desire of individuals to leave their inheritance to intended heirs have led to an increase in the demand for health insurance as they want to protect their income from being used in uncertain situations. Fischer (1973) explained that the standard model to explain the demand for health insurance implied that the breadwinner maximizes his expected uncertain lifetime by opting for life insurance. If the breadwinner met his untimely death, the beneficiaries receive claims and therefore, this shows that the demand for health insurance is caused singularly by the bequest. However, Lee (2012) did found otherwise that there is a negative relationship between bequest motives and health insurance consumption. When the individual's bequest motive is higher, they are more likely to save rather than purchasing a health insurance. Arun (2012) also presented the same viewpoint that the



reason for an individual to purchase health insurance is to protect their children and secure their financial needs if premature death should occur and this seems to be indirectly linked to income level. His study showed that life insurances are mainly purchased by low-income workers due to bequest motives. -

### *Risk Attitude*

Kruse and Ozdemir (2004) stated that risk attitude can affect the decision to purchase health insurance. Risk provides different meanings to various people (Adams, 2014). According to Lawrence (1976), risk is "the measure of probability and the weight of undesired consequences. A definition by the Law on Safety and Health (2005) stated that risk is "the likelihood of an injury, disease or damage to the health of employees due to hazards". In recent years, there has been a growing interest about risk attitude of individuals in behavioral finance with focus on their financial planning practices and management of risk as insurance is considered as the transfer of a group or an individual's risk to another person or a firm. There are several parts of an individual's risk attitude towards purchase of health insurance. First, it is regarding the financial risk of their perception on health risk; while secondly, it pertains to the exposure of safety and environment risk; and thirdly, their experience of the incidents. These three concerns are inter-related. Initially, risk-averse decision makers would purchase more health insurance compared to the less risk-averse people. To minimize the risk of losing their wealth due to some unexpected events such as sickness, individual purchase health insurance for protection (Heo, Grable & Chatterjee, 2013; Font & Villar, 2009).

Halek and Eisenhauer (2001) stated that education and income are associated with risk attitude when making purchasing decision on health insurance. A higher educational level leads to a greater awareness of the necessity to be protected by health insurance. In addition, health care cost is usually a concern among

the lower income individuals. In Pauly's (2007) study, risk-averse attitude and income level are inversely related. Feeling of being uncertain about one's health condition and concern about their medical bill motivate one's voluntary purchase of health insurance. Stroe and Iliescu (2010) found that there is a positive relationship between risk-averse attitude on safety and environment perspective and the intention to buy health insurance. As an effort to eliminate the feeling of worry, there is greater initiative towards health insurance consumption. It is an attempt of the individual to change the uncertainty to being more certain about life events by having an insurance on their life in the event of death. Tennyson and Yang (2014) explained adverse life experience may cause greater demand on health insurance due to changes in the perception of risk. Demand on health insurance may also be caused by previous encounter with informal care and this increases the awareness on the risk, thus resulting in purchase of health insurance (Courbage & Roudaut, 2008). This includes incidence such as the experience of a family member or close friend who had no fund for medical treatment, therefore, prompting the purchase of health insurance.

### *Social Influence*

Social influence is also a factor that determines one's intention to purchase health insurance. It includes influence from peers, families, insurance agents and others. Ulbinatė, Kucinkienė and Moullec (2013) found that social influence and intention to purchase health insurance are positively related. An individual might purchase health insurance to copy others behaviour who are also doing it. They perceive fear when they know their family, friends and neighbours are involved in indiscreet, uninsured disaster, and begin to believe that insurance protection is important and need to be attained. Moreover, they may feel embarrassed for not owning any protection after they learned that others have them (Kunreuther & Pauly, 2005). According to Giné et al. (2008), the dissemination of

information about insurance products occurs via the social networks. Therefore, social influence is a strong source that causes people to change their mind about health insurance. Besides that, Dercon et al. (2011) identified the role of a peer referral treatment which benefits any subscriber who succeeds in convincing other individuals to purchase health insurance. For instance, a 10% incentive is awarded to any subscriber who was able to convince another potential client to buy a health or life insurance.

Individual may gather information about health insurance from their friends or the people around them. In Liu, Sun and Zhao (2014) study, individual gain more knowledge and experience about health insurance from words-of-mouth communication and also from observational learning. Additionally, this is true for those who live in the rural areas as the peer groups live in a close distance and there is greater interaction for knowledge and information to flow. Therefore, rural residents are more likely to share their knowledge and information about health insurance and influence others to buy it.

The role of health and life insurance agents is to inform consumers and it is important that they understood the consumers' expectation and are able to fulfil the standard expectations (Walker & Baker, 2000). The insurance agent is a representative from the insurance company whose main purpose is to interact and convince customers to purchase health and life insurance. Their ability to do this is determined by the quality of their service. According to Ackah and Owusu (2012), they found although many a lot of people know what insurance is from their peers but it does not lead to their purchase of insurance to protect themselves from unprecedented

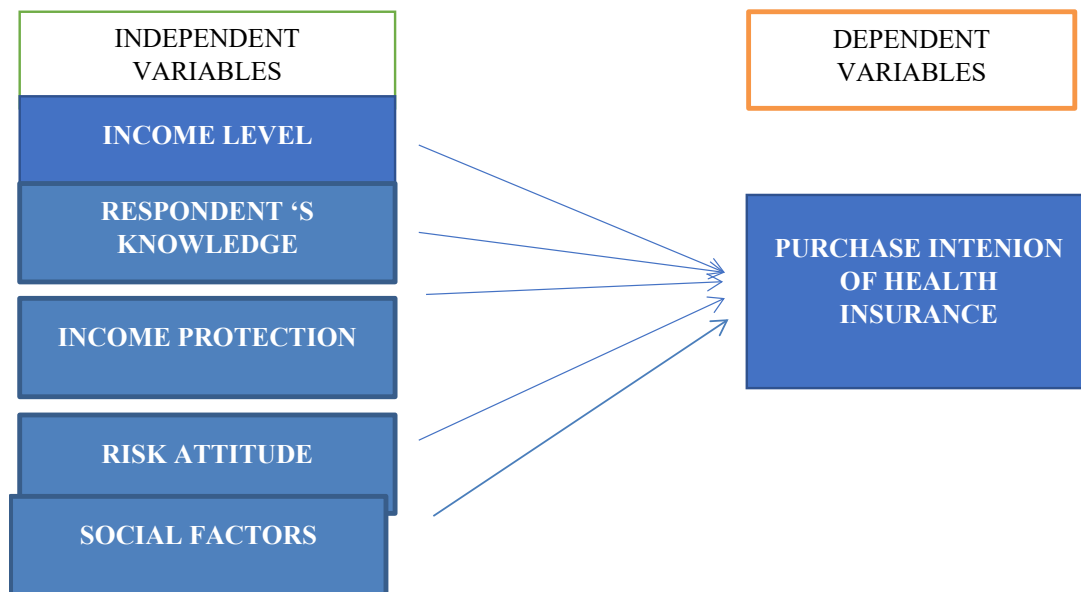
events. Cai, Janvry & Sadoulet (2011) found that households are more likely not to purchase any insurance product if they have friends with weak knowledge of insurance.

## METHODOLOGY

### *Research Framework*

The demand theory was used as the base to form the research framework. According to the law of demand, the greater the price of a good, then there will be lesser people who demand for it. This is because the opportunity of buying the good will be higher. Other than the price of the good, many factors can affect the demand of a product or service. The demand for health insurance can be influenced by various factors. Income level determined the purchasing power of the household. The higher the income level, the greater the factors that is influencing the purchase of health insurance. Life expectancy is the second most important variable used as the factor to determine the demand of life insurance. Countries that have higher life of life expectancy demand for more health insurance. To protect the household members from any misfortunes, the numbers of dependent also place an important role. The higher the number of dependent, the greater the demand for health insurance.

Other than the variable mentioned above the income expectancy is also an important variable that can influence the factors that is influencing the purchase of health insurance. The higher the income expectancy, the higher the anticipated cost of living. Thus, the relationship between the two variables is positive. The research framework was adapted and modified base on the studies conducted by Li, et al. (2007).



**Figure 3.1: The Research Framework**

*Research Hypotheses*

Based on the research framework, these research hypotheses are presented which will be tested in this study.

H1: The income level is positively and significantly related to the intention to purchase health and life insurance

H2: The knowledge level is positively and significantly related to the intention to purchase health and life insurance

H3: The income protection is positively and significantly related to the intention to purchase health and life insurance

H4: The risk attitude is positively and significantly related to the intention to purchase health and life insurance

H5: Social influence is positively and significantly related to the intention to purchase health and life insurance

*Research Design*

In collecting relevant data survey, methodology is considered useful in descriptive and correlation studies because of its versatility, efficiency and generalizability. Through a descriptive survey method, data was gathered and collected from specific questionnaire. Survey method is based on primary data

collection technique. This method is useful in describing characteristic and behavior of targeted the factors that influencing the purchase of health insurance. Among others, the advantages of descriptive survey method are high accuracy results, flexible and enable for large amount of information. This survey also offers a reasonably quick, inexpensive, efficient, and accurate means of ascertaining the characteristics, knowledge, attitudes, and behavior of individual who demands for the health insurance in Kota Kinabalu. In this research, a cross-sectioned survey was adopted as the research design due to the fact that the study is based on observational study that analyses data collected from targeted group of samples using questionnaire instrument made at a single point in time. The research design also entails causal-comparative or quasi-experimental methodology, that identifies cause-and-effect relationships between independent and dependent variables that influences the decision to buy health insurance.

*Data Collection*

Data collection approach was conducted through questionnaire method. The questionnaire was distributed with the collaboration with CIMB Bank, Financial/



Insurance Specialists. A total of 200 questionnaires had been distributed to group of CIMB Financial/Insurance Specialists in Kota Kinabalu which represent as the agent to sell health insurance to the consumers. In addition to that the survey was conducted in the demand and interest of health insurance in Kota Kinabalu. The questionnaires were in English as most of the consumers are from the medium to higher income group and with good education background.

### Sampling Design

Sampling is regarded as a process that utilizes a subset of a population that is needed to draw a conclusion that can represent the entire population (Zikmund, 2003). The result will predict some unknown populations' characteristics (Zikmund, 2003). Zikmund, Babin, Carr and Griffin (2010) mentioned that the sampling frame as source of material where the sample is drawn. Sampling location is the place of the research conducted in order to obtain data and information. Data for this study were collected from the CIMB customers in Kota Kinabalu, Sabah.

### Location of the Study and Target Population

This research was carried out at selected branched of CIMB in Kota Kinabalu that is CIMB Api-Api Centre, CIMB Jalan Sagunting,

CIMB Inanam, CIMB Riverson and CIMB Bundusan Square.

### Sampling Size

The sample shall be larger than 30 and less than 500 which based on Roscoe (1975) recommendation. This is due to the fact that by using a larger sample size, a more accurate data can be generated (Malhotra et al., 2006). A total of 200 questionnaires were distributed to the targeted respondents. In order to conduct a pilot test or a reliability test, Lackey and Wingate (1998) suggested the use of a 10 per cent of the actual study sample size to ensure sufficient sample for the pilot study. Therefore, questionnaires were initially distributed to 30 samples in the pilot test to determine the reliability of the research instrument. Ultimately, in the actual study, a total of 200 respondents were selected.

### Data Collection Procedures

Prior to the actual survey exercise, 30 questionnaires were distributed among the respondents. The purpose of this pilot test is to ensure that the proposed study design is feasible, reliable and valid (Thabane et al., 2010) based on the Cronbach's alpha. As for the result, data were analysed based on Cronbach alpha and the results are presented in Table 3.1.

**Table 3.1. Reliability Statistics in Pilot Study**

Section	Alpha Cronbach Coefficient	Reliability
Section B (Income Level)	0.836	Acceptable, High
Section C (Knowledge Level)	0.865	Acceptable, High
Section D (Income Protection)	0.888	Acceptable, High
Section E (Risk Attitude)	0.912	Acceptable, High
Section F (Social Factors)	0.700	Acceptable, High
Section G (Intention to Purchase)	0.756	Acceptable, High
Overall Scale	0.965	Acceptable, High

All the data collected were analysed using SPSS (IBM Version 23.0). Descriptive statistics includes the frequency distribution for the respondent’s profile and general background information about their health and life insurance purchase. Mean value was used to describe the perception of the respondents about the influencing factors of health and life insurance purchase. A reliability test was conducted to test the internal consistency of the dependent and independent variables based on Cronbach’s alpha (Sekaran & Bougie, 2011).

## RESULTS AND DISCUSSION

### Demographic Profiles

In this study, five demographic characteristics of the respondents were sampled: gender, age range, geographical area, level of monthly income and level of highest education. Table 4.1 presents a summary of the respondents’ profiles. The description of the respondents based on each demographic characteristic is given using its respective graphical representation.

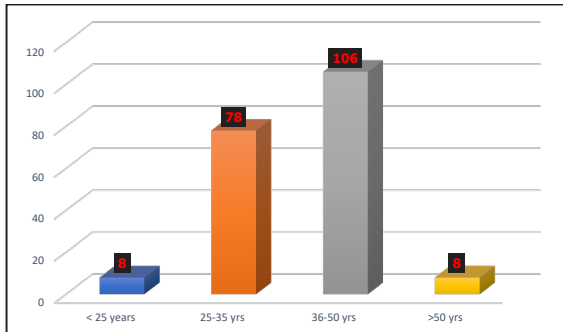
**Table 4.1. Demographic Profiles of the Respondents**

Demographic Characteristics	Total	Percentage (%)
1. <b>Gender</b>		
a. Female	153	76.5
b. Male	47	23.5
2. <b>Age Range</b>		
a. Less than 25 years old	8	4.0
b. 25 – 35 years old	78	39.0
c. 36 – 50 years old	106	53.0
d. 50 years old and above	8	4.0
3. <b>Geographical Area</b>		
a. Urban	153	76.5
b. Rural	47	23.5
4. <b>Monthly Income Level</b>		
a. Less than RM2000	38	19.0
b. RM2001- RM4000	82	41.0
c. RM4001 and above	80	40.0
5. <b>Highest Education Level</b>		
a. Secondary	15	7.5
b. Diploma	61	30.5
c. Undergraduate	58	29.0
d. Postgraduate	61	30.5
e. Professional Qualification (Accountant, Doctor, Pilot etc.)	5	2.5

Figure 4.1 shows the respondents’ profile based on gender. It is shown that majority of the respondents are female with 153 or 76.5% compared to only 47 male respondents or 23.5%.

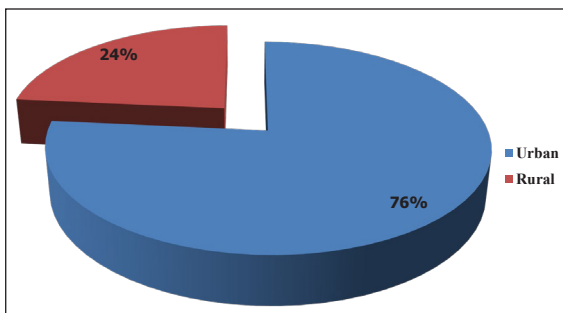
**Figure 4.1. Respondents’ Profile Based on Gender**

Figure 4.2 shows the respondents' profile based on age range. Majority of the respondent are between the age of 36 and 50 years old with 106 respondents or 53.0% followed by those between the age of 25 and 35 years old with 78 respondents or 39.0% while those between less than 25 years old have 8 respondents or 4.0% and those aged 50 years and above also have 8 respondents or 4.0%.



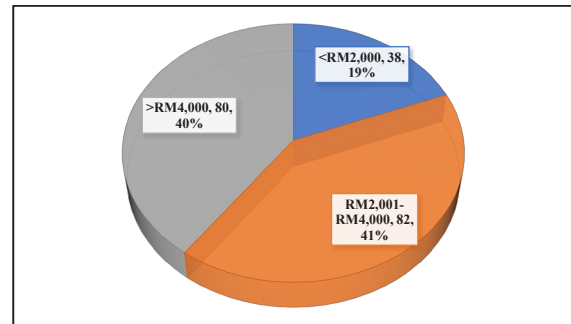
**Figure 4.2. Respondents' Profile Based on Age Range**

Figure 4.3 shows the respondents' profile according to the geographical area they are from. The result shows that majority of the respondents are from the urban area with 153 respondents or 76.5% compared with 47 respondents or 23.5% from the rural area.



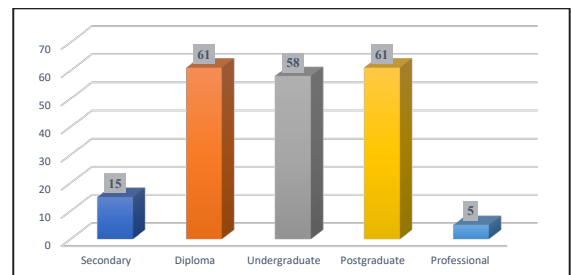
**Figure 4.3. Respondents' Profile Based Geographical Location**

Figure 4.4 shows the respondents' profile based on their monthly income level. It shows that 82 respondents or 41% are currently earning an income in between RM2,001 and RM4,000 while 80 respondents or 40% are earning RM4,001 and above. A total of 38 respondents or 19% are earning less than RM2,000.



**Figure 4.4. Respondents' Profile Based Monthly Income Level**

Figure 4.5 shows the respondents' profile based on their highest education level. Majority of the respondents, with 61 of them or 30.5% are postgraduate and diploma holder followed by 58 respondents or 29.0% are undergraduate. There were 15 respondents or 7.5% are in secondary level, and lastly 5 respondents or 2.5% are with the professional qualification (Accountant, Doctor, Pilot and etc).



**Figure 4.5. Respondents' Profile Based Monthly Income Level**

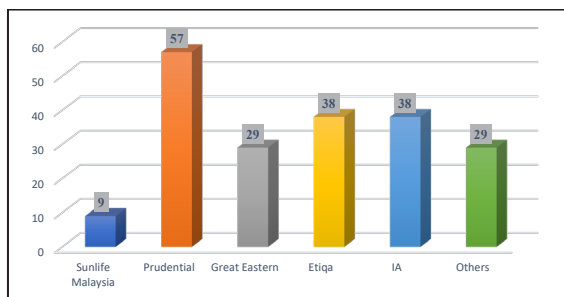
## 2.1 Life Insurance Background

Table 4.2 presents the insurance background of the respondents. This includes their insurance preferences, amount of insurance policies they have, their annual premium and types of insurance they owned.

**Table 4.2. Insurance Background Profiles of the Respondents**

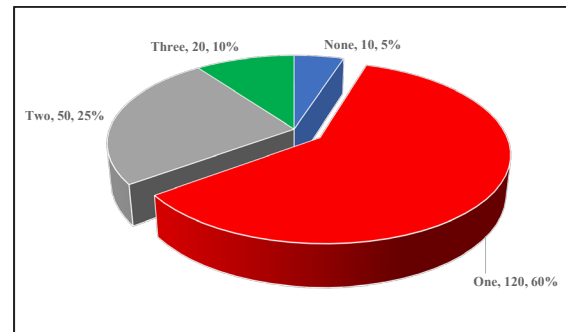
Demographic Characteristics	Total	Percentage (%)
<b>1. Insurance Preference</b>		
a. Sunlife Malaysia	9	4.5
b. Prudential	57	28.5
c. Great Eastern	29	14.5
d. Etiqa	38	19.0
e. AIA	38	19.0
f. Others	29	14.5
<b>2. Amount of Insurance Policies</b>		
a. None	10	5.0
b. One	120	60.0
c. Two	50	25.0
d. Three	20	10.0
<b>3. Annual Premium</b>		
a. RM0 – RM1000	77	38.5
b. RM1001 – RM2000	46	23.0
c. RM001 - RM3000	47	23.5
d. RM3001 and above	30	15.0
<b>4. Types of Insurance</b>		
a. Medical Card	127	63.5
b. Savings/Annuity	84	42.0
c. Life Insurance	102	51.0
d. Education Insurance	27	13.5
e. Personal Accident	79	39.5

Figure 4.6 shows the insurance preference of the respondents. Most of the respondents preferred Prudential with 57 respondents or 28.5%, followed by Etiqa and AIA, each with 38 respondents or 19.0%. There are 29 respondents or 14.5% who preferred Great Eastern while 9 respondents or 4.5% preferred Sunlife Malaysia and 29 respondents or 39.5% stated others.



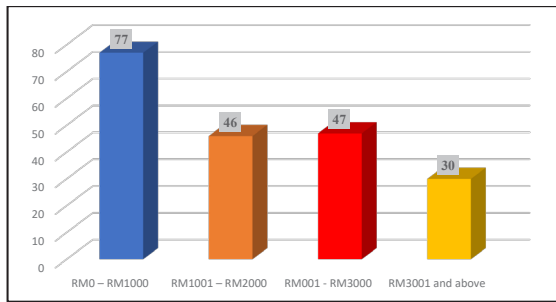
**Figure 4.6. Respondents' Insurance Preference**

Figure 4.7 indicated that majority of the respondents have one policy with 120 of them or 60.0% while 50 respondents or 25.0% have two policies and 20 respondents or 10.0% have three but 10 respondents or 5.0% had none.



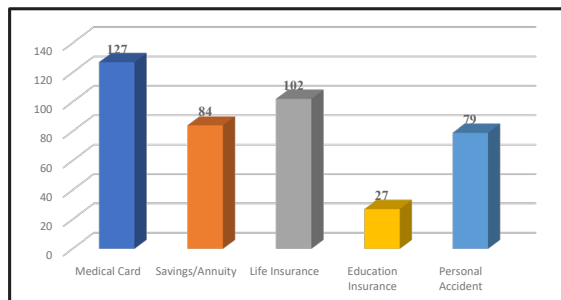
**Figure 4.7. Respondents' Insurance Policies Amount**

Figure 4.8 shows that most respondents with 77 of them or 38.5% have insurance annual premium of less than RM1,000 while 46 respondents or 23.0% with a premium between RM1,001 and RM2,000 and 47 respondents or 23.5% with premium between RM2,001 and RM3,000. Only 30 respondents or 15.0% have annual premium of more than RM3000.



**Figure 4.8. Respondents' Annual Premium**

Figure 4.9 portrays the types of insurance that the respondents owned. Majority with 127 of them or 63.5% have medical card while 102 or 51.0% with life insurance, 84 or 42.0% with savings/annuity, 79 or 39.5% with personal accident and least of all, education insurance with 27 or 13.5% of the respondents.



**Figure 4.9. Respondents' Types of Insurance**

**Table 4.3. Respondents' Perception on Income Level**

Statement	Mean	Standard Deviation	Level
Portion a monthly income as an insurance premium	3.5450	0.96051	Moderate
Income increases and purchase of insurance also increases	3.2350	0.92415	Moderate
Buy life and health insurance regardless of income earns	3.1350	1.04510	Moderate
Commitment on health insurance	3.4050	0.98275	Moderate
Overall	3.3300	.77482	Moderate

Table 4.4 presents the responses to the four items representing respondent's knowledge on insurance on mean and standard deviation values. The result shows that the respondents' knowledge of insurance as factors to purchase insurance (mean = 3.650) and enough insurance knowledge (mean = 3.1700) willing to give advice to others to buy insurance according to their needs (mean = 3.2300) and to get professional advice before purchasing health and life insurance (mean = 3.7550). Overall, the mean is considered moderate (mean = 3.4450).

## Statistical Analyses Result

### Descriptive Analyses

Five factors that influence the purchase intention of health insurance in Kota Kinabalu, Sabah were studied. These include the level of income, knowledge, income protection, risk attitude and social factors. The responses to the items that represent each of these factors are presented as follow.

Table 4.3 presents the responses to the four items representing the income level based on mean and standard deviation values. The result shows that all mean scores are high for each item. By putting a monthly portion to pay for an insurance premium (mean = 3.5450), increase of purchasing insurance as income increases (mean = 3.2350), buying health insurance regardless of income earns (mean = 3.1350) and a commitment on health insurance (mean = 3.4050). Overall, the mean score is 3.330.

**Table 4.4. Respondents' Perception on Knowledge about Insurance**

Statement	Mean	Standard Deviation	Level
Knowledge of insurance as factors to purchase insurance	3.650	1.00470	High
Enough insurance knowledge	3.1700	0.91942	Moderate
Give advice to others to buy insurance according to their needs	3.2300	0.90620	Moderate
To get professional advice before purchasing health and life insurance	3.7550	1.03941	High
Overall	3.4450	.79103	Moderate

Table 4.5 presents the responses to the six items representing the income protection based on mean and standard deviation values. All mean scores for each item were found to be moderate. The respondents perceived highly on the continuation of their children education after their death (mean = 3.6900), to purchase insurance for future health care expenditure (mean = 3.6250), guaranteed TPD benefits are critical design (mean = 3.5950), loans on hand will be settled upon a death event by the insurance benefits (mean = 3.3000) and as a bread winner in a family (mean = 3.0950). Overall, the mean of 3.4450 indicates that income protection is perceived moderately by the respondents.

**Table 4.5. Respondents' Perception on Income Protection**

Statement	Mean	Standard Deviation	Level
Guaranteed TPD benefits are critical design element	3.5950	1.01297	Moderate
As a bread winner in a family	3.0950	1.02530	Moderate
Purchase insurance for future health care expenditure	3.6250	0.97423	Moderate
Loans on hand and in the event of death, insurance benefits will pay off all the loans	3.3000	1.06096	Moderate
My children can continue their education in the event of my death through the insurance benefits	3.6900	1.01442	Moderate
Guaranteed bonus and cash surrender value upon surrendering it	3.3650	.099333	Moderate
Overall	3.4450	.81583	Moderate

Table 4.6 presents the responses to the five items representing risk attitude based on mean and standard deviation values. All mean scores for each item were found to be moderate. The respondents perceived guaranteed benefits should anything happen to them build confidence to buy insurance (mean = 3.6200), health and life insurance ensure financial safety (mean = 3.5100), past sickness drive them to purchase insurance (mean = 3.4700), occupation influence the purchase of insurance (mean = 3.3600) and a risk adverse person (mean = 3.1300). Overall, the mean of 3.4180 indicates that risk attitude is perceived moderately by the respondents.



**Table 4.6. Respondents' Perception on Risk Attitude**

Statement	Mean	Standard Deviation	Level
I am a risk adverse person	3.1300	0.90953	Moderate
Health & life insurance provide financial safety	3.5100	0.96673	Moderate
Past sickness drives me to purchase insurance	3.4700	0.96110	Moderate
Guaranteed benefits should anything happen build my confidence to buy insurance	3.6200	0.97486	Moderate
My occupation influences the purchase of insurance	3.3600	1.02256	Moderate
Overall	3.4180	.77659	Moderate

Table 4.7 presents the responses to the four items representing the social factors based on mean and standard deviation values. Each of the items showed moderate mean score. Therefore, it is shown that the respondents perceived the awareness on the rising of medical cost (mean = 3.6350), words of mouth of its benefits (mean = 3.3150), purchase insurance by the influence of news (mean = 3.2950) and recommended by friends (mean = 2.9950). Overall, the mean score is moderate (mean = 3.3180).

**Table 4.7. Respondents' Perception on Social Factors**

Statement	Mean	Standard Deviation	Level
Purchase of insurance by the influence by news	3.2950	0.99141	Moderate
Awareness on the rising of medical cost	3.6350	1.07590	Moderate
Words of mouth of its benefits	3.3150	0.98009	Moderate
Recommended by friends	2.9950	0.95369	Moderate
Overall	3.3100	.81915	Moderate

Table 4.8 presents the respondents' perception on purchase intention of life insurance. The mean values showed moderate level of response for their intention to increase their health and life insurance policy (mean = 3.420), will purchase more health and life insurance with a higher premium (mean = 3.520), will purchase additional health and life insurance policy (mean = 3.1650), and will promote health and life insurance policy to their family and friends (mean = 3.640). Overall, the mean is moderate at 3.4362.

**Table 4.8. Respondents' Perception on Purchase Intention of Life Insurance**

Statement	Mean	Standard Deviation	Level
I intend to increase my health and life insurance policy	3.4200	.95295	Moderate
I will purchase more health and life insurance policy with a higher premium.	3.5200	0.93486	Moderate
I will purchase additional health and life insurance policy	3.1650	1.02127	Moderate
I will promote health and life insurance policy to my family and friends.	3.6400	0.93529	Moderate
Overall	3.4362	0.71021	Moderate

### Reliability Test

The internal consistency of the actual data was determined using the reliability test with Cronbach's Alpha. Table 4.9 presents the result that all the Alpha Cronbach coefficients are more than 0.700, therefore indicating that there is good and acceptable internal consistency.

**Table 4.9: Reliability Test of the Actual Study**

Section	No. of Items	Alpha Cronbach Coefficient	Reliability
Section B (Income Level)	4	0.909	Acceptable, High
Section C (Level of Knowledge)	4	0.798	Acceptable, High
Section D (Income Protection)	4	0.806	Acceptable, High
Section E (Risk Attitude)	4	0.820	Acceptable, High
Section F (Social Factors)	4	0.848	Acceptable, High
Section G (Intention to Purchase)	4	0.722	Acceptable, High
Overall Scale	28	0.949	Acceptable, High

### Correlational Analysis

Table 4.10 presents the correlational analysis of the five factors influencing the purchase intention health insurance in Kota Kinabalu. The result shows that all five factors were significantly correlated to intention to purchase health insurance. However, the correlation between income level ( $r = 0.695$ ,  $p = 0.000$ ), respondent’s knowledge ( $r = 0.765$ ,  $p = 0.000$ ), income protection ( $r = 0.872$ ,  $p = 0.000$ ), risk attitude ( $r = 0.855$ ,  $p = 0.000$ ) and social factors ( $r = 0.766$ ,  $p = 0.000$ ) with intention to purchase of health insurance in Kota Kinabalu. Thus, it concludes that income protection and risk attitude correlate more with the intention to buy health and life insurance to other factors. The lowest correlation is between income level, respondent’s knowledge and social factors with the intention to purchase health and life insurance in Kota Kinabalu. Based on the significant values, all research hypotheses are accepted. Income level, knowledge level, income protection, risk attitude and social factors are significantly, positively and strongly related to purchase intention of life and health insurance.

**Table 4.10. Correlational Analysis Result of Actual Study**

Hypotheses	Pearson Correlation Coefficient (r)	Sig. (2-tailed) (p)
H1: Income Level → Purchase Intention	0.695	0.000
H2: Level of Knowledge → Purchase Intentions	0.765	0.000
H3: Income Protection → Purchase Intention	0.872	0.000
H4: Risk Attitude → Purchase Intention	0.855	0.000
H5: Social Factors → Purchase Intention	0.766	0.000

### Normality Test

Table 4.11 shows the skewness and Kurtosis values for each of the scales used in this study. The result showed that the skewness values were all less than +1.00 or -1.00 and the Kurtosis values were all less than +3.00 or -3.00. Therefore, this indicates that the distribution of data in each scale is normal.

**Table 4.11. Normality Test Results**

Variable	Skewness	Kurtosis
Income Level	-0.373	0.381
Respondent’s Knowledge	-0.817	1.213
Income Protection	-0.743	0.957
Risk Attitude	-0.821	1.278
Social Factors	-0.744	0.800
Intention to Purchase	-0.787	1.299

## DISCUSSION, RECOMMENDATION AND CONCLUSION

### *Gender and Geographical area*

The result revealed that all the responses for the independent variables have a mean value of close to 4, stating the response stand of agreeing. The profiles of the respondents clearly state that the respondents were mainly female, at the age category of 38 and above, living in the urban area and have an income of RM4, 000 and above. This is followed by the reliability test. The reliability test revealed that the questions are able to answer the objective of this research. The correlation test also showed a strong and positive relationship between the independent variables and the intention to purchase health and life insurance. It was also found that the correlation value was significant at five percent significance level. The normality test also confirmed that all the variables were normally distributed thus a multiple regression can be carried out.

### *Income level*

The relationship between income level and the intention to purchase health and life insurance is significant and strong. This is mainly contributed by two items that is by putting a monthly portion to pay for an insurance premium and a commitment on health insurance.

### *Knowledge Level*

Among the independent variables, income and the respondent's knowledge were both insignificant in explaining the changes in the intention to purchase health and life insurance. This is because insurance is a necessity. At the same time the medical cost is rising. Therefore, whether a person has a high income or low income the intention of health and life insurance purchase is always there. The purchase of the insurance was more on the trust the respondents have on the agent

rather than their own knowledge. Some of them no doubt understands the importance of purchasing the insurance but they still do not want to purchase them because they trust the government can provide them with the necessary health care and facilities when they need them. The findings do not support the findings in the literature review like Burnett and Palmer (1984), Pilska and Yii (2007, Liu, Gao and Rizzo (2011), Wang and Rosenman (2007) and Sarwar and Qureshi (2013).

The result shows that the respondents' knowledge of insurance as factors to purchase insurance (mean = 3.650) and enough insurance knowledge (mean = 3.1700) willing to give advice to others to buy insurance according to their needs (mean = 3.2300) and to get professional advice before purchasing health and life insurance (mean = 3.7550). Overall, the mean is considered moderate (mean = 3.4450).

### *Income protection*

All mean scores for each item were found to be moderate. The respondents perceived highly on the continuation of their children education after their death (mean = 3.6900), to purchase insurance for future health care expenditure (mean = 3.6250), guaranteed TPD benefits are critical design (mean = 3.5950), loans on hand will be paid off in the event of death by the insurance benefits (mean = 3.3000) and as a bread winner in a family (mean = 3.0950). Overall, the mean of 3.4450 indicates that compensation plan is perceived moderately by the respondents.

### *Risk attitude*

Risk attitude comes in when the respondents feel that they need to transfer the risk to someone else. When they fall sick, they might incur a loss of income because they cannot perform their job, thus they get insurance to compensate their loss of income. Some also get insurance because they know that they

need to pay a high medical cost and might incur a loss of income. Thus, it is better for them to get the insurance. The findings are supported by the study conducted by Arun (2012), Kruse and Ozdemir (2004), Font and Villar (2009) and Pauly (2007).

All mean scores for each item were found to be moderate. The respondents perceived guaranteed benefits should anything happen to them build confidence to buy insurance (mean = 3.6200), health and life insurance ensures financial safety (mean = 3.5100), past sickness drive them to purchase insurance (mean = 3.4700), occupation influence the purchase of insurance (mean = 3.3600) and a risk adverse person (mean = 3.1300). Overall, the mean of indicates that risk attitude is perceived moderately by the respondents.

### *Social factors*

Finally, the intention to purchase health and life insurance is influenced by social factors. Since everyone is getting insurance, you would be considered left out by the society. Thus, this pushes someone to get the insurance. This also supports the findings of Ulbinate, Kucinkiene and Moullec (2013). Each of the items showed moderate mean score. Therefore, it is shown that the respondents perceived the awareness on the rising of medical cost (mean = 3.6350), words of mouth of its benefits (mean = 3.3150), purchase insurance by the influence of news (mean = 3.2950) and recommended by friends (mean = 2.9950). Overall, the mean score is moderate (mean = 3.4180).

### *Intention to purchase*

Each of the items showed moderate mean score. Therefore, it is shown that the respondents perceived the intention to increase their health and life insurance cost (mean = 3.4200), to purchase more health and life insurance with a higher premium (mean = 3.5200), purchase additional health and life insurance policy (mean = 3.1650) and promote

health and life insurance policy to family and friends (mean = 3.6400). Overall, the mean score is moderate (mean = 3.4362).

### **1.1 Limitations of the Study**

Limitation of studies 200 questionnaires are being distributed among the five branches of CIMB Bank in Kota Kinabalu by their Financial Service Consultants and Personal Financial Consultant. Questionnaires are written in English language, and some people don't really understand what were the questions asked and even don't understand what were the right answers they should pick.

The accuracy of the results obtained from the respondents might be impaired due to their emotional states and also, the timing of answering the questionnaire. Furthermore, respondents may have answered it just to fulfil the sales staffs' requirement.

Lastly, this study had examined the five independent variables (level of income, level of knowledge about insurance, income protection, risk-averse attitude and social factors).

### **1.2 Recommendation for Future Research**

Future research should include education and wealth protection insurance. This is because many people still not aware about this type of insurance except for those in the preferred banking customers as these customers are being approach due to their high deposits in the bank. Thus, sales staff or agents see the needs of these people according to the benefits of these insurance are offering.

Since this research is only conducted in the five branches of CIMB Bank in Kota Kinabalu, suggestion that future researchers might widen their area in conducting this research to the whole states of Sabah in order to get more accuracy result. Apart from that, only 200 samples were used in this study but

with a greater number of samples in future research, the reliability and accuracy of the findings can be improved some more.

Researchers may have multilingual questionnaire instead of only one version which is English. This will be easier for the other respondents to answer it correctly.

### 1.3 Recommendations

There are five recommendations on how to influence people to buy insurance. It doesn't matter whether it is a health and life insurance or just personal accident coverage. The difference between these two are:

#### 5.5.1. Health and Life Insurance (Medical Card, Education, Wealth Protection)

This type of plan offers a wider range of coverage, from health, hospitalization, education, critical illnesses, investment and whole life insurance. Premium of this type of plan can be on monthly, quarterly, half yearly and annually. It doesn't only cover your hospitalization, it also covers you on all types of accident and should anything happen to you within the policy issuance, either total permanent disablement due to sickness or accident or death due to illnesses or accident, the benefits will immediately be enforced. Thus, once the benefits being claimed, the insurance coverage is automatically being terminated.

#### 5.5.2. Personal Accident (PA)

This type of plan normally offers you a lower premium and it is only pay by annually. The coverage is only for accidents. Should anyone died due to illnesses, the benefits will not be paid and if in the event that the policy owner being hospitalized due to illnesses, they can't claim the cost of medical or hospitalization. However, many insurance industries have designed a plan of this type of insurance to suit the needs of the general public nowadays.

1. General public should be aware of the importance of insurance is not mainly to protect themselves but for their love ones.
2. General public should understand what are the plan they are buying and how much are the total coverage per plan their policies are holding.
3. The organization should also be aware that there is insurance called key man insurance, to protect the owner of the company. Should anything happen to the key person, even death or total permanent disablement, the insurance benefits will pay off the company's loan balance, staff salaries and anything that related to the company's matters.
4. Insurance company should educate the public the importance of having an insurance at least one policy per person to prepare in the event of sickness, death and total permanent disablement.
5. Public should also know that if he or she have insurance and make a nominee on it, should anything befall them they bank or any organization cannot make claim due to the nomination in the policy.

### 1.4 Conclusion

Income protection, risk attitude and social factors were found to be significant in explaining the changes in the intention to purchase health and life insurance. It is generally believed by Malaysians that those who have loans to settle upon their death should own health or life insurance. This is because when they pass away the family can use the money to settle the outstanding liability and eases the pain of the respondents. Furthermore, should they make an absolute assignment to their trusted next of kin or any appointed person to the insurance they purchased; in the event of death, no debtors can claim the insurance benefits from them. Therefore, every asset purchased is complemented with the insurance package. It is a win-win situation for



the bank. Insurance is also bought to protect their financial losses because of uncertainty in the economy. This is usually used as a reason by entrepreneurs. This is supported by Lewis (1989), Berheim (1991) Fischer (1973), Lee (2012).

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