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Personality Traits of Coronary Heart Disease Patients: A Study of Female Young Adults

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The present research aimed to explore personality traits of young female adults (32-45 years of age) with coronary heart disease. Ten participants who had been diagnosed with a kind of coronary heart disease for at least one year and resided in Bangkok or nearby provinces were the informants in this study. Data were collected by using McAdams' key scenes narrative interview, in-depth interview, scenarios, and participatory observation. Extended information was gained from some of the informants' family members. All ten informants were born and raised in a conventional Thai or Chinese-Thai cultural context and reported having at least one source of excessive stress in their lives. The findings showed 2 patterns of personality traits. The pattern I personality traits were submissiveness, proneness for anxiety and depression, insecurity, lack of self-confidence, frequent emotional inhibition, and discomfort when involved in social situations without support. These were all compatible with Denollet's Type D personality construct, while the pattern II personality traits were excessive competitive drive, impatience and hostility which relatively compatible with Friedman and Rosenman's Type A personality construct. Moreover, most informants with pattern I personality traits came from a lower socio-economic status background, had limited education, and suffered from inequality in social opportunities comparing to those with pattern II personality traits.

***Keywords*:** coronary heart disease patients personality traits/pattern I personality traits/pattern II personality traits

Coronary Heart Disease (CHD) is one of the cruel diseases that could either take the life away or disable person for life at any time without warning. Primarily, women were believed to have less risk in exposing to some modifiable risk factors such as alcohol, tobacco and high lipid food consumption. Estrogen was also believed to have protective effects amongst younger women since the incidence of CHD increased in women at older age (Connor & Bush, 1991; Edmunds & Lip, 2000; Fakiri, Bruijnzeels, & Hoes, 2006). From World Health Organization's (2007) report, CHD is the most common cardiovascular disorder and is responsible for almost 50% of cardiovascular deaths globally. In America alone, it is estimated that more than 32 million women have one or more forms of cardiovascular disease (Bello & Mosca, 2004). Most cardiovascular events in women are caused by CHD. Comparable to the United Kingdom, amongst 120,000 deaths per year, CHD is responsible for 23% of deaths before the age of 65 years in men and 13% in women (Price, 2004).

In Thailand, the Health Information Unit Bureau of Health Policy and Strategy, Ministry of Public Health (Public Health Statistics, 2007) reported that the diseases of the heart and blood vessel are the third running of top ten leading causes of death in the year 2003 and 2007. In 2003, number of death rates per 100,000 was accounted for 37.7% and for 29.1% in 2007.

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Even though the death rates cause by the disease has been somewhat declined, the rates were still high and in the same ranking when comparing to other leading causes of death in the country. In parallel with the statistics from the Out Patient Unit at Siriraj Hospital, one of the biggest government hospitals in Thailand, the number of patients who were diagnosed with any form of coronary heart disease ICD-10™ (Ministry of Public Health, 2009) code I 20 – I 25 has been increasing every single year. There were 7,236, 9,885, 11,374 and 11,801 cases of CHD in 2005, 2006, 2007 and 2008, respectively (Medical Statistics Division, Siriraj Hospital, 2009). These data led to questions about the comprehensive of biomedical risk factors of heart diseases which were used in campaigning for decades. In consequence of limited capacity in preventing people from heart disease explained by biomedicine, the personality traits and individual contexts were purposed as missing pieces that might fulfill the wholeness of description. By understanding personality traits and individual contexts, health professionals can target and modify the risk factors more effectively.

Throughout the entirety life, people encounter different developmental tasks that provide life with some psychosocial unity and purpose to form the self-concept. During the period of late adolescent and young adult years, people search for integrating their incongruent roles, talents, tendencies and social involvements into a patterned configuration of thoughts and activities (McAdams, 2001b; 2006). This important developmental process allow people to integrate the past events, recent self-concept and hypothetical future into a systematical, coherent personal narrative resulted in what McAdams (2001b; 2008) called life story which are the reflection of a psychosocial *unity* and a *purpose* within the modern world.

According to McAdams (1996b, 2006) life stories are considered as psychological constructions which each story has its constitutive meaning within norms, rules and traditions in a particular society and culture that the person was born, raised, and resided til the end of their life. The stories co-authored by each person and within the cultural context that person's life is embedded and given meaning. Life story is a person’s own narrated product, his or her own characteristic way of arranging elements of the self into a temporal sequence complete with setting, scenes, characters, plot and themes. Naturally, a person has more than one life story that he or she has traits, goals, plans, values and so on (McAdams,1996a, 2001b). Therefore, in order to obtain the data, this research utilized McAdams’ key scenes as a major part for stimulating informant to tell her life story.

Objectives

This research aimed to explore personality traits of young adult females who were diagnosed with coronary heart disease and to apprehend their personality traits and related contexts through their lives stories.

Method

Informants and ethical consideration

After the Ethic Committee Board of Research of Siriraj Hospital approved the research, the researcher started reviewing medical records of female patients who fit the inclusion criteria, which were:

1) Female
2) Age ranged from 32-45 years old.

3) Has been diagnosed with Coronary Heart Disease (ICD 10 code I20 – I25 except unstable angina) for at least one year
4) Religious conviction is Buddhism
5) In a stable stage of the disease and/ or without life threatening symptoms
6) Intact reality testing (no signs and symptoms of thinking and perception distortion)
7) Intact intellectual function
8) Be able to fluently communicate

The medical records of those who fit the above criteria were further verified by the 2nd year fellow in cardiology to confirm the diagnosis and to ensure that patients were in stable condition and safe to participate in the research prior to the invitation. The nature of the research, its benefits and pitfalls were verbally explained to the informants. Confidentiality was assured and maintained by removing the information that could link an individual to the data and using pseudonyms. The patients who were willing to participate were asked to sign the consent form, with the right to discontinue the status of research informant at any time. The data used in this study was collected from 10 female informants, age ranged from 32 – 45 years old. All informants resided in Bangkok or nearby provinces.

Data collection

The data collection was held at least in three main places: at the outpatient unit of the Cardiovascular Unit, Department of Medicine, Siriraj Hospital; at the informants' residence; and at the informants' workplace or nearby places at the informants' convenience. The process of data collection had started from May to November 2010.

Techniques used in data collection

1. Narrative interview: Individual narrative interview was conducted using McAdams' five different kinds of scenes and episodes in life (McAdams, 2001a) including 1) High Points or Peak Experiences, 2) Low Points, 3) Turning Points, 4) Memories across period of life-span, and 5) Other Memories / Future Scene

2. In-depth interview: Individual in-depth interview was conducted using key questions as a guideline or scope of the area of interest. Moreover, interviews was also intended to capture the informant's demographical data, personal and family health history, psycho-social factors, personality traits, life stories, coping mechanism, lifestyle and vulnerable coronary heart disease risk factors exposed, as well as probing for interesting details of each informant's developmental process of their personality and life stories.

3. Scenarios: There were ten scenarios which were designed to stimulate the informants to show their attitude toward common activities that could occur daily and unquestionably reflects the informants' coping style. These were purposely used in order to observe the informants' response as a comparable illustration in reflecting values and attitudes towards everyday life situations.

4. Observation: Non-verbal gestures, body languages, and behaviors during the interview processes were used for verifying the congruence with the verbal content obtained.

5. Participatory observations: Some participatory observations such as participating in some activities of the informants and their families or friends were also used in collecting

the data of their lifestyles and life stories. This technique was used only if the permission was obtained from the informants.

6. The key informants: Through informants' permission, some extended information was obtained from some of their family members, which were either husband or close relatives who lived with the informant such as son, daughter, nephew, sister, daughter in-law and close friend.

7. Data analysis: Multiple techniques and sources of data explored were used to facilitate validation of data cross verification from more than two sources. Content analysis techniques were used to summarize and figure out personality pattern of the informants. The obtained contents from each informant were then further analyzed to obtain the patterns. The contents that were repeatedly shown out were grouped into pattern, which proposed the elaboration of personality traits, frequently found in CHD patients who participated in this research.

Findings

The results revealed 2 major groups of traits which were named Pattern I and Pattern II personality traits. In detailing, main group of pattern I personality traits were compounded of 5 traits, whereas pattern II personality traits were consisted of 4 dominance traits.

The Compound of Pattern I Personality Traits:

1. Low self-esteem and Poor self-perception

There was a group of informants who saw themselves in deficient, inferior and imperfect and nothing to be proud of in being their selves; "*people always looked down the poor; this made me feel bad about myself of being poor. Without money I could not talk much, the voice of the poor may compare to the sound of dog barking"*. They usually perceived only unpleasant or defected part of their selves *"...I'm just a villager who used to be only nurse assistance. I don't know much about high society social manner and luxurious things such as brand name bags and accessories"*.

2. Lack of self-confidence

Some informants always show up hesitated when interacting with others. They usually felt insecure in doing things alone and feel that "*it safer (for me) to have someone to …help me in making decision"*. Consequently, they frequently preferred to stay in silent at the back, say nothing even though they disagree since "*it's safer not to express much*" and they were unsure "*what would they respond if I illustrated that I disagree"*. Most informants who had this trait usually need support in doing things.

3. Diffidence toward others

Diffidence occurred when feeling like being someone else's burden, as a result of not being able to take care of their business. There were at least two patterns of diffidence toward others showed in stories. The first pattern was diffidence toward others, which was originated from Thai cultural way of thinking that followers, younger or inferior people were shaped or taught to show their diffidence to others especially to the superiors. The story about working

life of the informants highlighted that the more the informants thought they caused trouble to other people, the more they felt diffidence toward them. "*… even (I) feel like (I am)sick as a result of sleep deprivations from continuing so many night shifts, I still go to work as usual as a result of diffidence toward night shift colleague".*

However, in some cases, diffidence occurred because of some degrees of disability as a result of illness that caused some limitations in doing things or living daily life. The findings showed that most physical limitations put some strains on most informants to majorly adjust themselves to maintain their career. Some informants had to "*…resign to avoid diffidence toward…* (their)*… colleague"*, while some had to change their job duties.

4. Unassertive

Some informants were reluctant to stand up and speak what they feel, think and desire. They showed their hesitating and unassertive feeling to insist on their position or to preserve their rights; "*I frequently choose to keep quiet. Although this may make someone take advantage on me, just because I don't want to lose neither chance, opportunity nor my temper at the same time. So, I chose to end the pressured situation quickly by letting them achieve what they want."* This frequently made them to be at a disadvantage.

5. Submissive

In the sense of feeling of inferiority, they always perceive themselves for having nothing comparing with others and feeling lack of power to negotiate with the authority, some of informants frequently stated their conformity to authority figures. These patterns have been found across different situations including family matters "*I chose to keep quiet if my opinions would not be accepted or would be displeasing him because quarrelling was something I always wholeheartedly try to avoid. I'm not that keen in business so, it is safer and better to listen to him."* Or legal matter "*the factory, first, rejected to pay the compensation but after the government worker who was responsible in taking care of labor safety had dome the negotiation for us, the factory promised to take full responsibility for the expenses but they paid us only half. We had to accept it because we have no power to negotiate with them."*

Many life stories in this research reflected the irritabilities, upset feelings, hostilities and angers toward surrounding people or life situations. However, most stories ended with holding back their emotions and turning frustrated feelings against their selves by repeatedly reinforced their inferior self-perception. As a result of that, informants altered and coped with their emotions by avoiding being involved in social situations. The characteristics found in this study were relatively compatible to the Type D personality construct (Denollet, 1997a; 1997b). that characterized by "negative affectivity", the chronic suppression of substantial negative emotions, such as hostility, anxiety, anger, depressed mood, tension and negative views of self. They are likely to be constantly on alert for signs of impending trouble and to overreact to stressful life events together with the inability to express these emotions which is likely to cause more distress (Denollet, 1998; 2000a; DeFruyt & Denollet, 2000b). Along with negative emotions and emotional suppression, these individuals also experience tension, feeling insecure and uncomfortable in social situations so they tend to inhibit the expression of emotions and behavior in social interactions which is termed "social inhibition", another core characteristic of Type D personality (Denollet, et al, 1995; Denollet, 1998, DeFruyt & Denollet, 2002).

There were at least three common factors shared among informants whose personality traits were well-matched with the personality pattern I. First, most informants were born and raised in big families where all the members' needs such as schooling and medical care were unable to be fully gratified. Second, four out of five were born and raised in the same conventional Thai cultural background, while one out of five was Chinese-Thai. Although, there were some different detailed attitudes and values between these two cultures, the core beliefs were almost the same. Entire of them shared the same attitude about conventional female roles and get used to be with the follower or supporting role in their family. Finally, four out of five personality pattern I informants own families and also their families of origin were low socio-economic status. There was only one informant in this group who was born and raised in a relatively wealthy agricultural family from the North East province.

The Compound of Pattern II Personality Traits:

1. Hostility

Some informants strongly expressed their feelings, exclaimed their needs and preserved their standpoints or defended their beliefs straightforward without caring about others' feelings. As a result of that, they were perceived by others as an unfriendly person. This kind of expression has been clearly found in some informants, such as "*I'm not the one who suppresses my feeling on the contrary. I'm a kind of straight forward person who seriously assert to preserve my right without worrying how people may think about me"* Or *"I still can't bear people who talks or behaves in a provocative way. So, I usually respond to them in a straight forward manner and in a hot-tempered way without worrying about what they may think about me"*.

2. Determination

Many informants showed sense of strong intention in doing things with a purposeful look. They declared their firmness in going straightforward to what they had to do or intend to do without hesitation and "*kad maiploi*" (กัดไม่ปล่อย/ take action seriously and will never let go). They "…*never let go* … (and) … *ready to put all efforts to conquer what* (they) *intend to do"*. Nothing can stop them until they reach what they want.

3. Strong sense of competition

This group of informants not only wants to achieve in whatever they did but also wanted to be only a winner not a looser when comparing to people in their range. As can be seen from the story of one participant *"I'm eager to use all my energy in fulfilling my strong intention to remain in the top ranking apartment in the area"*. Therefore, they passionately involved in inventing or creating new strategies in handling their job effectively to be in the leading position of the group they attended.

4. Goal and achievement orientation.

For some informants, they highly value their success. The most important thing in their lives was achieving the goal they wanted to reach; *"I got used to motivating myself to reach my potential. I always set goal in doing things. This alerts me to move forward to achieve what I want"*. They always put all their potential to do whatever they wanted or have to do even if it would cost their time and energy to fulfill it.

This pattern of personality traits was shared by three informants; two of them possess and run their own businesses while the rest used to take part in her husband's business before quitting and be a housewife after family business was collapsed. This group of informants' life stories, since they were in their late twenties to early thirties, reflected their fighting spirit and tough-minded when facing those challenges in their lives and business. All of them showed their believed that the experience in handling their businesses altogether with daily life experience, family and cultural values of hard working had modified them to be what they are today. The elaborated life stories, expressions and the way the informants behaved as seen through data collecting processes were, in some degree, recognizable with Type A personality pattern in which hostility feeling, intense and sustained drive to achieve, eagerness to compete and persistent desire for recognition traits were reinforced in stories told by pattern II personality traits of this research.

There were at least three common factors shared among informants whose personality traits well-matched with the personality pattern II. Firstly, they were born and raised in sufficient families which could gratify all of their essential needs and supported them in doing what they wanted to. This leads them to be positive and feel satisfy with themselves which became the good precursor in forming their self-confident and self-determination even in time of challenges. Secondly, their families had rather high income which placed them in their satisfaction socioeconomic status. This group of informants themselves not only their families also earned higher income and two out of three had higher educational level when compared to the informants who compatible in the personality pattern I of this research. Finally, all of them were born and raised in the same cultural background of Chinese-Thai which naturally modified their commercial and business skills by living in this atmosphere. Even though all of them mentioned the double standard in child rearing between daughters and sons, they all fought for their recognition by being patience and endurance in hard working. Even though the informants were playing a leading role in her own business, pattern II personality traits informants were not excluded from the given female cultural role. They all stated that they were assigning conventional female role "inside" their houses and expected to play supporting role as followers of her husband.

All informants participated in this research from both cultural context mentioned the expectation for female to be a good daughter for their family of origin and also for their husband's family, to be a good housewife for their husbands, and a good mother for their children while some, especially in the group of pattern II personality traits, were also had to play an active role as a leader when needed as the "outside" houses responsibility. Most informants, who had pattern II ran a successful businesses that made them positioned in a high status in the family. Their husbands accepted and respected their business abilities. However, they had to trade this recognition with living in stressful and competitive working lives and face with double stressful work load from the "inside" and "outside" house work in order to maintain their acceptance and "higher status".

Focusing on the residences, three informants who were in the group of personality pattern I live in her own property, which almost still be in mortgage or had to pay for the rent monthly, located in the sub-urban areas while the remainders living in urban area in their own housing; town-house and commercial buildings. While all informants in personality pattern II live in urban area. Two informants in this group lives in commercial buildings; one in her own property, another in a rental building, whereas the rest lives in well-decorated town house and also own one more house in sub-urban area. The data revealed that informants with

personality pattern I had tendency to struggle more in earning money to pay for their housing. This could be counted as a long term economic burden.

Spotlighting on health, eight among the ten informants had at least one chronic illness and/or family history of signs, symptoms or diagnosis of chronic illness, including hypertension, diabetic mellitus, and obesity, which were identified as coronary heart disease risk factors. These findings reinforce the significant of biological risk factors which make known for a long period of time.

Socioeconomic status were one of the most mentioned in having strong influence on forming specific set of traits like poor self-perception, low self-esteem and inferiority feeling. Most informants in the group of pattern I personality traits mainly complained about their economic problems. They mentioned the consequences of being in low socio-economic status as one of the most powerful variables in determining their lives. As a result of born and raised in the economic insufficiency family, most informants had been exposing to elevated level of the chronic stress since they were young. This group of informants reflected their gloomy tone of moods in the stories. Also, the limitation in education opportunity had led them to many inequalities in lives.

Discussion

Although both groups of personality traits of female young adult CHD patients found in this research were companionable with the previous familiar Western's constructs which were group and named "Type D" and "Type A" Personality traits, there were some specific socio-cultural contexts that emerged in this research which differed from previous Western researches.

Firstly, the dissimilar was gender differences. In Western culture which the 2 personality types (or patterns) were constructed did not discuss much details on genders and social/family ranking (older and younger). However, from the findings in this research, dissimilar expected responsibilities between genders and younger were frequently emphasis as powerful factor effecting informants' lives. Although entire members who born and raised in conventional Thai or Chinese-Thai cultural contexts were influenced by core cultural contexts that value being grateful to the guardians, obedient to the older and conformity to cultural and social norm, female were expected more. Despite the changed of some values in Thai society nowadays, women still have to face with stress in their life when comparing to male. Similar to the work of Sarutta (2002) and Chunuan et al. (2007), all informants in this research articulated that the social expectation of being a "good woman" and following the conventional role as a supporter or a follower of their husbands in maintaining equilibrium of their family life. The life stories told by every informant affirmed the encultural process which occurred to them naturally by living their lives through time and cultural situation in the society.

Overall, the main data found from this research was relatively matched with McAdams's communion theme, which was influenced largely by the collectivist cultures that individuals tended to evolve their stories around a communion theme and put more emphasis on conformity to social norms and group work in their life stories. However, unlike that McAdams purposed some of informants who were in high economic status and took the role as a leader or played an equal role as her husband told their life story in tone of agency theme underlying individual goals and achievements, even if living their lives in nearly the same social and cultural context as the major group.

Secondly, all informants were exposed to excessive stress in life, frequently with the theme of spouse having an extra-marital affair, losing their loved one, or seriously attacked by the disease which made some of them experienced near dying state or disability in the process of their CHD treatment, these excessive stress caused most of them to feel discouraged in living their life. Most informants reported that inner- strength, courage and support by their children and family altogether with Buddhist teaching as resources that informants believed helped making them back to their equilibrium after the crises. Similar to Chunuan et al. (2007), the cohesiveness of family and Buddhism were Thai's way in living their lives, in which all informants in this study used them as the object to rely on during their lives crisis.

Apart from basic cultural context, there were some noticeable different determinants between two patterns of personality traits. Majority of the informants with pattern I personality traits reported earning lower and, in some cases, unstable income, had lower educational level comparing to the informant with pattern II personality traits.

Recommendations

The personality pattern of young female adult CHD patients which were found from this research portrayed several appealing issues such as attitude toward their selves and other, coping style and typical pattern of emotional expression which were proved to have related effect toward both health behavior or directly to health. These findings emphasized the role of psycho-socio-cultural factors in CHD patients that could help fulfilling the gap that biomedical alone has omitted. Therefore, the medical professionals can make use of this piece of information for holistic way of caring, by considering the physical conditions, personality traits and any other psycho-socio-cultural context of patients. In addition, personality traits and patterns found in this study could be applied as target and be used when creating appropriate health promotion and prevention program or health education workshop to help empower people to be more aware of how the personality traits could contribute to their mental and physical health.

For future research, the expansion of informants, informants' age range and extension of time spending in data gathering may help in clarifying more of personality patterns of CHD. The keywords from this research could be used as a precursor to construct a standardized questionnaire to collect large scale data. Moreover, mixed methodology between qualitative and quantitative may help in proving complicated data not only statistical value but also some more detailed explanation of the research subjects and may better clarify or perhaps answer some questions that are still not clear from the information gained from narrative or any other qualitative technique alone.

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