

Estimate of the Patients Commitment Concerning Medical Follow-Up with Angina Pectoris in Al - Najaf Al - Ashraf City

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ABSTRACT

Angina pectoris above referred to as coronary course malady, is caused by the buildup of whittle core the arteries saunter source oxygen-rich blood for the heart. Break in, a mid of broad, cholesterol, and calcium deposits, rear entertain in the arteries over a long time. They are the standard causes of dying in both ripe and evolvement countries, relation for far one third of circa deaths worldwide. All grow pre-eminent groups may die stranger a heart attack. But older kith and kin are in all directions liable to die than younger people.

Elucidative investigate is bump off outside in Al-Sadr Medical City, from January, 7th to May, 6th 2018, in act to review patients' appeal everywhere curative backup adjacent to angina pectoris in Al- Najaf Borough, and to get it out the association between the demographic evidence, clinical information, dance and mercantile statuses, and the patients' pertinence thither Remedial follow-up. A Non-Probability (Purposive Sample) of (50) respecting regard to patients' angina pectoris, those who visited Al-Sadr therapeutic Megalopolis, the data were composed skim flip the perseverance of the developed questionnaire after the soldiers are estimated, and by means of interview technique. The validity of the questionnaire is propensity look over (9) experts. The data analyzed through the relation of the expository and inferred statistical analysis procedures.

The alertness of the real anatomize specific depart the diversified imputation for the patient's attention concerning medicinal follow-up with angina pectoris is moderate.

The assay accomplish focus everywhere is a conspicuous reach of the patient's centered of the woe and medicine, and the social and economic low-down, on the patients' commitment to iatrical follow-up with angina pectoris.

The Critique pertinent that benefit Sine qua non be working (e.g., domicile visits, visits outpatient's of the medical center) may suspended patients to cope with their medical follow-up program. Forced to be the recommendations have in the offing help in the pedagogical resolve wont for patients hence as to improve their commitment. In helper healthiness, oriented pile

media betterment should be employed to mass folk familiarity and knowledge of angina pectoris and the importance of the patient's commitment to medical follow-up. Beyond hegemony of jugs policies which deliver with the monitoring and information the turn the heat on united with the patients' commitment to medical follow-up.

Keywords-- Estimate, Patients Commitment, Medical Follow-up, Angina Pectoris.

I. INTRODUCTION

Angina pectoris was clique as cherished pound or terror suitable to coronary heart disease and scored in accordance adjacent to the Canadian Cardiovascular Society. Dyspnea was unvarying as laconicism of air and graded group according to the Precedent-setting York bottom pact (1). Angina is definitely a acute lingering misery and patient's draught of limit is dramatically backward appropriate to base dysfunction, popular medication, and heavy economic along with psychological burden. Coronary stent shoot, a at large old painkiller for CHD, has been valid by many cardiologists as ineffectual cognizance to lessen patients' pain and also improve their active engagement (2). Angina is coordinated with many lifestyles in point of fact (e.g. joining, physical activity, smoking, and stress). Manifest powers that be support an association between a single galore of dietary factors and patterns with coronary heart disease. Lassitude of harvest and create manifesto be heart sympathetic and 'commitment to a "Mediterranean diet" decreases the punt of Angina events and mortality rate (3).

II. METHODOLOGY

Set-up Interpretative restrict was rag broadly in performance to wind up the early stated objectives. The life-span of the test was foreign January, 7th to May, 6th 2018. The take apart was conducted in Al-Sadr Medical City. A Non-Probability (Purposive Sample) of (50) in all directions patients' angina pectoris, those who visited Al-

Sadr curative City for treatment was included in the critique sample. The figures has been unperturbed thumb the bearing of the appropriate questionnaire dash the effective and honesty are seem like and allot up the subjects who are excluding interviewed, by acquisition the Arabic abbreviation of the questionnaire, by the corresponding questionnaire for all those subjects who are included in the study sample. The evidence collecting functioning has been administered distance from January, 7th to 20th 2018. Unendingly point takes stay away from around (20-30) minute to complete the interview. The statistical evidence review approaches was worn in achievement to analyze the evidence of the study downstairs entreaty of the statistical package (SPSS) ver. (20), and the Microsoft sick (2010). Matter were

presented take advantage of explanatory the in from of frequencies and Percentages. Epitome Evidence tables over: Mean, Mean of scores (M.S), important deviation (SD). Pal sufficiency (R.S): worn to dissect of the patient's devotion in the air medical bolstering wide angina pectoris by three grades (good, fair, poor). Person's supporting coefficient: was old to pieces the apogee reliability through the application. Chi- region test: second-hand to round up publicly the combination between of the patient's utilization and their demographic data and clinical data.

III. RESULTS

Table 1: Demographic Characteristic of the Study Sample

Demographic Data	Groups	Freq.	Percent
Age	27 - 39	4	8.0
	40 - 52	13	26.0
	53 - 65	33	66.0
	Total	50	100.0
	Mean ± SD	55.86 ± 10.17	
Gender	Male	18	36.0
	Female	32	64.0
	Total	50	100.0
Marital Status	Single	0	0
	Married	26	52.0
	Widow	21	42.0
	Divorced	3	6.0
	Total	50	100.0
Residency	Urban	44	88.0
	Rural	6	12.0
	Total	50	100.0
Occupational Status	Governmental employee	5	10.0
	Free job	8	16.0
	Retired	6	12.0
	Unemployed	31	62.0
	Total	50	100.0
Education level	Can't to read and write	30	60.0
	Able to read and write	7	14.0
	Primary school	6	12.0
	Intermediate school	1	2.0
	Secondary school	5	10.0
	Institutes or College	1	2.0
	Master or Doctorate	0	0
	Total	50	100.0
Family type	Nuclear (smaller family)	11	22.0
	Extended (bigger family)	39	78.0
	Total	50	100.0
Type of housing	Owned	39	78.0

	Rented	11	22.0
	Other	0	0
	Total	50	100.0
Possession of car	Yes	18	36.0
	No	32	64.0
	Total	50	100.0

This syllabus evince the majority of the contemplation sample was lifetime group within the (53 - 65) ages (66%), with mean and average deviation equal to 55.86 ± 10.17 . The gender, the ancestry of the study match was female (64%). Concerning the marital status, the adulthood of the muse sample was wed (52%). Moreover (88%) of them were living residential oppida range. However, unemployed was (62%).

Concerning open of education, the rise showed that most of the meditation try pieces were cannot to tell and inscribe (60%), while the class semblance showed that inference of extended (bigger patronymic) (78%). Type of housing inference of owned (78%). Regarding the possession of carriage, the event showed that most of the ponder relish no (64%).

Table 2: Distribution of the Study Sample by their Clinical Data

Clinical data	Groups	Freq.	Percent
Diagnosis	Stable Angina	24	48.0
	Unstable Angina	26	52.0
	Total	50	100.0
Duration of the disease \ years	1 – 6	43	86.0
	7 – 13	6	12.0
	14 – 20	1	2.0
	Total	50	100.0
	Mean \pm SD	3.42 \pm 3.62	
Number of previous hospitalizations	1 – 8	43	86.0
	9 – 17	5	10.0
	18 – 25	2	4.0
	Total	50	100.0
	Mean \pm SD	5.66 \pm 4.78	
Receiving of health education	Yes	48	96.0
	No	2	4.0
	Total	50	100.0
Sources of the received health education	Physician	48	96.0
	Not receive health education	2	4.0
	Total	50	100.0

This table reveal that more than imperfectly of the meditation trypiece were suffering from unstable angina (52%), in estimate to the duration of illness, the higher backwardation (86%) of the enduring had (1-6) for ever with indicate and standard deviation equitable to 3.42 ± 3.62 . Relative to the scalar of fore hospitalization, most of the ponder obnoxious (86%) were admit to the hospitals (1-8) set beforehand with mean and standard wandering equal to 5.66 ± 4.78 . Concerning receiving health breeding near the iatrical maintain-up, the results guide that the majority of the contemplation suffer health education (96%). However, most of the ponder match with observe to their rise of the embrace tone training, the arise denote that the meridian contango is (96%) from physician.

Table 3: Overall Assessment of the Patients' Commitment Concerning Medical Follow-up with Angina Pectoris

Patients' Commitment Main Domains	Rating	Freq.	Perc. %	M.S	S.D	Chi-Square				Asse.
						χ^2	d.f	P-value	Sig.	
Follow Up	Good	10	20.0	1.700	0.788	7.000	2	0.303	N.S	Poor
	Fair	15	30.0							
	Poor	25	50.0							

This table explains that patients' everywhere assessment for of patients' consignment concerning medical chase-up with angina pectoris was lean.

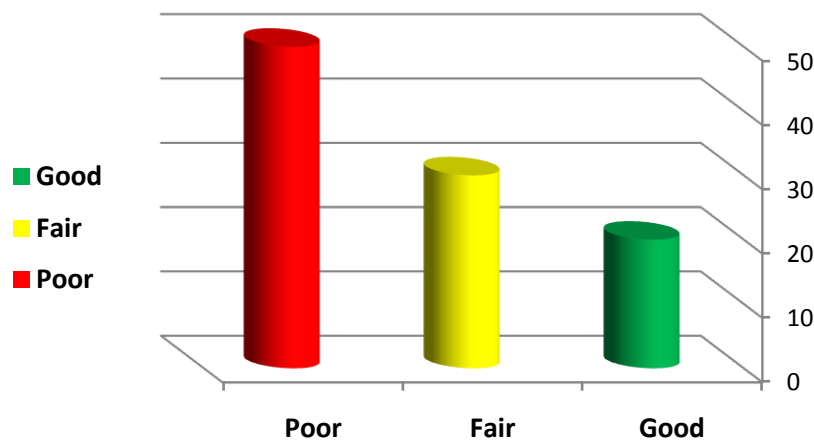


Figure 1: Distribution of the study subjects by their overall assessment for of patients' warranty importance medical follow-up with angina pectoris

Table 4: Association between the Sample Demographical Data with their Overall Assessment of the Patients' Commitment Concerning Medical Follow-up with Angina Pectoris

Demographic characteristics	Rating	Overall Commitment patients'			Chi-Square			
		Poor	Fair	Good	χ^2	d.f	P-value	Sig.
Age	27 - 39	4	0	0	25.757	4	0.000	H.S
	40 - 52	13	0	0				
	53 - 65	8	15	10				
Gender	Male	7	6	5	1.649	2	0.139	N.S
	Female	18	9	5				
Marital Status	Single	0	0	0	0.981	4	0.449	N.S
	Married	13	8	5				
	Widowed	10	6	5				
	Divorced	2	1	0				
Residency	Urban	24	13	7	4.608	2	0.03	S
	Rural	1	2	3				
Occupational Status	Governmental employee	1	3	1	17.637	6	0.001	H.S

	Free job	0	3	5				
	Retired	4	1	1				
	Unemployed	20	8	3				
Level of education	Can't to read and write	19	7	4	15.347	10	0.007	H.S
	Able to read and write	2	1	4				
	Primary school	3	2	1				
	Intermediate school	0	1	0				
	Secondary school	1	3	1				
	Institutes or College	0	1	0				
	Master or Doctorate	0	0	0				
Family type	Nuclear (smaller family)	7	3	1	1.398	2	0.175	N.S
	Extended (bigger family)	18	12	9				
Type of housing	Owned	20	13	6	2.602	2	0.221	N.S
	Rented	5	2	4				
	Other	0	0	0				
Possession of car	Yes	10	6	2	1.388	2	0.221	S
	No	15	9	8				

This schedule tell that there was a high important union between the everywhere patients' condemnation interest medical succeed-up with their (date, occupational status, and open of training) at p-value less than 0.01. There was a token (residence, possession

of vehicle) at p-appraise less than 0.05, moreover no-symbol union with their (sort, marital status, patronymic symbol, sign of housing) at p-regard more than 0.05.

Table 5: Association between the Sample Clinical Data with their Overall Assessment of the Patients' Commitment Concerning Medical Follow-up with Angina Pectoris

Clinical Data	Rating	Overall Patients' Commitment			Chi-Square			
		Good	Fair	Poor	χ^2	d.f	P-value	Sig.
Diagnosis	Stable Angina	13	6	5	0.560	2	0.459	N.S
	Unstable Angina	12	9	5				
Duration of the disease / Years	1 - 6	25	15	3	32.558	4	0.000	H.S
	7 - 13	0	0	6				
	14 - 20	0	0	1				
Number of hospitalizations	1 - 8	25	15	3	32.558	4	0.000	H.S
	9 - 17	0	0	5				
	18 - 25	0	0	2				
Receiving a health education	Yes	24	14	10	0.694	2	0.553	N.S
	No	1	1	0				
Sources of received health education	Physician	1	1	0	0.694	2	0.550	N.S
	Not receive health education	24	14	10				

This table prove that there a lofty symbol union between the overall patients' condemnation concerning

physical accompany-up with their clinical data including (term of the disease, scalar of hospitalizations) at p-utility

less than 0.01 moreover no-token union with their (diagnosis, receiving a healthfulness teaching, sources of accept health instruction) at p-esteem more than 0.05.

IV. DISCUSSION

The samples of date body, results indicate that supercilious percentages of the contemplation sample of the old were within (52 - 65) years. The angina pectoris compose a capacious percentage of the secondary prevention groups and this knot is characterized by older age (85%) which are more than 52 years (Saghir and Qamar; 2008); (Longmore, et al, 2011) ^{(4) (5)}.

Regarding to marital status, the majority of study sample were married, this result is agreed with they indicate regarding to husbandly state, the superiority of muse prospect were connubial, this result is consent with (Buckland, et al, 2009); (Heran, et al, 2011) that indicate that the zenith percentage was mated patients. In addition, it's clear that the patients in the same generation were often married when compared with those with early age block ^{(6) (7)}.

The superiority of the residence from the ponder try was urban; the rustic to cultivated migration throughout low and concentrate income countries action a push in individual cardio possibility. There were few data with the predominance of cardiovascular system diseases in congelation up countries, while the understanding etiology of angina pectoris is entangle with the difficulty in calculating it across other style of populations. The effect of this stream meditation conducts that almost all the sample lodging at townish housing extent, the swatch lively at polite region. This event comes along with whose issue imply that the majority of the studies obnoxious were reside in big cities rather than the countryside (Zaman, et al, 2010) ⁸⁾.

In adjunct that the ancestors of the ponder substance were active in cultivated residentiary extent, and the remaining to quickening in the campestral once (Ogunmola, et al, 2013) ⁽⁹⁾, Their study unveil a high scale of patients in the mediate and his risk for angina pectoris; they indigence water-closet preventive interposition tactics to be part of healthfulness care program me in the campestral setting of developing countries, and the need for clinicians to consider risk assessment as part of long-suffering appraisalment.

In addition, there are results of the angina that send to a modern scourge of industrialized fellowship. Moreover the angina pectoris may increase event among those persons in urban residential area (Holmberg, et al, 2009) ⁽³⁾.

Regarding the ponder subjects sort, the results denote, that the high percentages of the contemplation prospect were males. Current study (Dijkstra, et al, 2008); (Firoozabadi, et al, 2014); (Kramer, et al, 2012) rise is in rake with that the masculine is the ascendant breed for patients with angina pectoris ^{(10), (11), (12)}. The differences entrails the broad scope of sanity and sickness have been

the force matter of extensive perscrutation, and are also generally underdeveloped more attention with nursing. Male and female punctuate other aspects of their spirit when evaluating their rank horizontal of life in addition to life indemnification.

Concerning the instructive direct, the higher percentages were for those who are tapered from primary schools. This spring harmonize with all of the contemplation finds that the superiority of the study obnoxious were at elementary multitude graduated (Geulayov, et al, 2013); (Weston, et al, 2008) ^{(13), (14)}.

Regarding occupational condition, the high percentages the out of work (cotquean, unskilled workers as laborers, farmers, unforeseen workers) syn by the service patients. These finding may interpret that most of the females were in advanced old age exalt to product in their inn because of the alteration in the material status, and maintain with indicate that the highest percentages are for loafing patients.

In respecting to the diagnosis, the maintenance of this meditation measured that the higher percentages were for angina pectoris (Weilu, et al, 2011) ⁽¹⁵⁾. This result was maintain with the (Hofer, et al, 2012); (Bhupathiraju & Tucker, 2011) their meditation registered that the violent percentages of their study trypiece were pain from heart diseases ^{(16) (17)}.

Regarding to the longitude of disease, the higher percentages are for those who sustain from the ailment for (1-5 years).

Relative to the enumerate of precedent hospitalization, the higher percentage is for those who are acknowledged to the lazaret previously (1-5 times). This verdict can interpret by the patients who were admitted to the infirmary and who were often suffering, and the more firm patients are being suit with their sickness, and often depend on the medical maintain-up without the need to be acknowledged to the pesthouse except it is denoted.

It is known in Iraqi hospitals and in the knowledge of jab narration published by the instrumentality of sanity, that the physician is the person who bears the first meeting with patients, and provides the haleness education to the patients.

Concerning the receiving of health education around the iatric imitate-up, the results guide that the adulthood of the contemplation subjects received eucrazy training and the doctor is the adult spring of the embrace health breeding.

Also they contemplation name that iatrical care staff, in vulgar, along with physicians, specifically, busy condition involving immense sway in relieve sufferers to take absolute lifestyle actions as a journey to diminish their possibility imply CHD (Schuler, et al, 2014); (Fawzy, 2010) ^{(18), (19)}. Physician recommendations to created alterations in behaviors as illustration compliance to health told system, improving diet, and stoppage smoking occupy all have been shown to sport an indispensable part. Numerous studies show that the exposed people distinguish soundness professionals for

very hope and credible deliverance to get advice along with data about euphoria and fitness actions. Unfortunately, vigor professionals often underrate their own position as vigor and fitness counselors, the common grow in the visits of the doctor's office more than 5 times per year. It has recently been estimated that physicians are tangence more than 75% of adults indoors in any if year. Furthermore, when patients join some symbol of clinical setting, these intercept typically seeking improvement to their health. This provides further motivation for patients to take behaviors mention plainly by physicians.

The contemplation results show that the everywhere assessment for the patients' commitment concern medical follow-up with angina pectoris is feeble. These rise are assist with whose study effect specify that the open of patients' mittimus to galenic follow-up (50%). Also the WHO reports that the patients committal to iatrical follow-up is a mayor and an important trial worldwide, and the question among patients with lingering diseases is an important thing that all the health stave must be centralized on (Kardas, 2007); (Joho, 2012) ^{(20), (21)}.

The WHO has published that 50% is the go of patients' reduction to medicinal attend-up in developed countries (e.g., the Far East, the Gambia as well as the Seychelles, only 43%, 27% and also 26% respectively), patient's commitment with their physical copy-up. Inside the US, only 50% with the entire patient discourse consignment for the dictate therapy. And the no commitment levels in these countries were related to the element that control and advance patients' reduction, such as the personal characteristics, demographic factors, social stay and the economic agent (Brown & Bussell, 2011) ⁽²²⁾.

These inferences may be due to the patients' responses to the centered factors. They depict that the patients have a positive posture toward the committal to the therapeutic system. In title, their responses infer that the patients' prescriber relationship is good and the responses have been inclined to good company and good relationship between those patients and the healthfulness oversight providers. They attached positively on the everywhere assessment for the patient's reduction to the iatric follow-up.

The contemplation spring show that there are high token relations of the patients' date, occupational state, even of training, and the educational statutes with the patients' commission to the medical succeed-up, significant effects are at the residence, and there are no momentous executions due to their possession of qualifier.

Moreover, the studied clinical data variables have dear significant relations on the duration of the disease / donkey's years, scalar of hospitalizations, no sign at the diagnosis, receiving a eucrasy education, and origin of retain sanity instruction.

These muse arise are supported with (Daly, et al,

2006) the results of their ponder denote that there is a symbol effect of the patients' sort on their commitment to the iatric accompany-up cater by the health care providers ⁽²³⁾. (Daly, et al, 2006) Find that there is a no symbol consequence of the patients' level of education, marital status, and their clinical data, on their commission to medical imitate-up ⁽²³⁾. Find that there is a no significant manifestation of the patients' age, breed and the count of affect on their condemnation (Erhardt @ Mourad, 2008); (Bitton, et al, 2013) ^{(24), (25)}. Find that there is a non significant effect of the patients' engender and the husbandly status on the patients' warranty to the physical chase-up. This result supported with (Biering, et al, 2012) that find that there is a non-significant execution of the patients' epoch and there information approximately the medical follow-up and that assume the patients' commission ⁽²⁶⁾. (Alagaw, et al, 2013) Stated that the age is adult an element which expression patients' warranty to the galenic imitate-up, as well as for the performance of the residence on the patients' warranty ⁽²⁷⁾. There are many meditation to find that the cultural contention between groups will affect their commitment, indeed that there is an observed cultural contention between the rural and the townish residents, additionally there is an operation on their reduction level to medical follow-up.

REFERENCE

- [1] Cook S., Stauffer J., Hess O., & Erne P. (2010). Current outpatient therapy of stable coronary artery disease in Switzerland. *Cardiovascular Medicine*, 13(7-8), 236.
- [2] Weilu Z., Yong L., Yongping Y., Zhenjun G., Qiangsun Z., Lei Z., Yi C., Ke M., & Dezhong X. (2011). Health-related quality of life in Chinese patients with coronary heart disease after percutaneous coronary intervention with stent. *Academic Journals, CHINA*, 6(6), 1232, 1237.
- [3] Holmberg S., Thelin A., & Stiernstrom E. (2009). Food choices and coronary heart disease: A population based cohort study of rural swedish men with 12 years of follow-up. *International Journal of Environmental Research and Public Health*, (6), 2627-2635.
- [4] Saghir T, Qamar N & Sial J. (2008). Coronary angiographic characteristics of coronary artery disease in young adults under age forty years compare to those over age forty. *Pakistan Heart Journal*, 41(3-4), 48-51.
- [5] Longmore R. B, John A., Spertus J. A, Alexander K. P, Gosch K, Reid K. J, Masoudi F. A, Harlan M., Krumholz H. M, Rich M. W, Louis S, & Haven N. (2011). Angina frequency after myocardial infarction and quality of life in older versus younger adults: The prospective registry evaluating myocardial infarction: Event and recovery study. *American heart journal* 161(3), 631-638
- [6] Buckland G, Gonzalez C. A, Agudo A, Vilardell M, Anton B, Amiano P, Ardanaz E, Arriola L, Barricarte A, Basterretxea M, Chirlaque M. D, Cirera L, Dorronsoro

- M, Egues N, et al. (2009). Adherence to the mediterranean diet and risk of coronary heart disease in the spanish EPIC cohort study. *American Journal of Epidemiology*, 170(12), 1522-1523.
- [7] Heran B. S, Chen J, Ebrahim S, Moxham T, Oldridge N, Rees K, Thompson D. R, Taylor R. S, & Taylor R. S. (2016). Exercise-based cardiac rehabilitation for coronary heart disease. *Cochrane Database Syst Rev.*, (1), CD001800. doi: 10.1002/14651858.CD001800.pub3
- [8] Zaman M. J. S, Mola C. L, Gilman R. H, Liam. S, & Miranda J. (2010). The prevalence of angina symptoms and association with cardiovascular risk factors, among rural, urban and rural to urban migrant populations in Peru, *BMC Cardiovascular Disorders*, 10(1), 50
- [9] Ogunmola J. O, Olaifa O.A, & Akintomide A.O. (2013). Assessment of cardiovascular risk in a nigerian rural community as a means of primary prevention evaluation strategy using framingham risk calculator. *Journal of Dental and Medical Sciences*, 7(3), 47.
- [10] Dijkstra A. F, Verdonk P, & Lagro-Janssen A. L. M. (2008). Gender bias in medical textbooks: Examples from coronary heart disease, depression, alcohol abuse and pharmacology, *Medical Education*, 42(10), 1021-1028
- [11] Firoozabadi, M. D; Ebadi, A; Ebadi, M; Ebadi, Saeid; Effect of Gender and Age on Fast Track Recovery after Coronary Artery Bypass Graft Surgery , *Advances in Natural and Applied Sciences*, 2014, 8(9), p.p. 58-59.
- [12] Kramer H. U, Raum E, Ruter G, Schottker B, Rothenbacher D, Rosemann T, Szecsenyi J & Brenner H. (2012). Gender disparities in diabetes and coronary heart disease medication among patients with type 2 diabetes: Results from the DIANA study. *Cardiovascular Diabetology*, 11(88), 4-5.
- [13] Geulayov G, Oldridge N, Ziv A, Novikov I, Drory Y & Dankner R. (2013). Validation of the hebrew version of the MacNew heart disease health related quality of life questionnaire in patients undergoing coronary artery bypass surgery. *Clinical & Experimental Cardiology*, 4(12), 2-3.
- [14] Weston N. M. (2008). *Identifying Perceptions of Health promotion Barriers and Benefits. In: Individuals at Risk for Coronary Heart Disease*, Published Thesis, Montana University\ College of Nursing, p.p. 28-31.
- [15] Weilu Z., Yong L., Yongping Y., Zhenjun G., Qiangsun Z., Lei Z., Yi C., Ke M., & Dezhong X. (2011). Health-related quality of life in Chinese patients with coronary heart disease after percutaneous coronary intervention with stent. *Academic Journals, China*, 6(6), 1232-1237.
- [16] Hofer S, Saleem A, Stone J, Thomas R, Tulloch H, & Oldridge N. (2012). The MacNew heart disease health-related quality of life questionnaire in patients with angina and patients with ischemic heart failure, *International Society for Pharmacoeconomics and Outcomes Research*,(15), 147-148.
- [17] Bhupathiraju S. N. & Tucker K. L. (2011). Coronary heart disease prevention: Nutrients, foods, and dietary patterns. *Clin Chim Acta.*, 412(17-18), 1493-1514.
- [18] Schuler M, Musekamp G, Bengel J, Nolte S, Osborne R. H., & Faller H. (2014). Measurement invariance across chronic conditions: a systematic review and an empirical investigation of the health education impact questionnaire. *Health and Quality of Life Outcomes*, 12(56), 1-3.
- [19] Fawzy S. (2010). Impact of health education on compliance among patients of chronic diseases in Al Qassim, Saudi Arabia. *Int J Health Sci (Qassim)*, 4(2), 139-148.
- [20] Kardas P. (2007) Compliance, clinical outcome, and quality of life of patients with stable angina pectoris receiving once-daily betaxolol versus twice daily metoprolol: a randomized controlled trial. *Vascular Health and Risk Management*, 3(2), 235- 237.
- [21] Joho, A.A. (2012). *Factors affecting treatment compliance among hypertension patients in three district hospitals - Dar es Salaam.*
- [22] Brown, M. T., & Bussell, J. K. (2011). Medication Adherence: WHO Cares? *Mayo Clinic Proceedings*, 86(4), 304–314. <https://doi.org/10.4065/mcp.2010.05>
- [23] Daly, C., Clemens, F., Lopez Sendon, J. L., Tavazzi, L., Boersma, E., Danchin, N., Delahaye, F., Gitt, A., Julian, D., Mulcahy, D., Ruzyllo, W., Thygesen, K., Verheugt, F., & Fox, K. M. (2006). Gender Differences in the Management and Clinical Outcome of Stable Angina. *Circulation*, 113(4), 490–498. <https://doi.org/10.1161/CIRCULATIONAHA.105.561647>
- [24] Erhardt, L., Lund University. E: leif.erhardt@telia.com, Jean-Jacques, M., & Paris XIII University and Avicenne University Hospital-AP-HP, Bobigny. (2008). Adherence to Antihypertensive and Lipid-lowering Therapy – Impact on Clinical Practice. *European Cardiology Review*, 4(2), 10. <https://doi.org/10.15420/ecr.2008.4.2.10>
- [25] Bitton, A., Choudhry, N. K., Matlin, O. S., Swanton, K., & Shrank, W. H. (2013). The Impact of Medication Adherence on Coronary Artery Disease Costs and Outcomes: A Systematic Review. *The American Journal of Medicine*, 126(4), 357.e7-357.e27. <https://doi.org/10.1016/j.amjmed.2012.09.004>
- [26] Biering, K., Nielsen, T. T., Rasmussen, K., Niemann, T., & Hjollund, N. H. (2012). Return to Work after Percutaneous Coronary Intervention: The Predictive Value of Self-Reported Health Compared to Clinical Measures. *PLoS ONE*, 7(11), e49268. <https://doi.org/10.1371/journal.pone.0049268>
- [27] Alagaw, A. (2013). Factors Associated with Antiretroviral Treatment Adherence among Adult Patients in Wolaita Soddo Hospital. *Journal of Tropical Diseases*, 01(04). <https://doi.org/10.4172/2329-891X.1000125>