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EFFECT OF NURSING INSTRUCTIONS ON SELECTED OUTCOME AMONG PATIENTS WITH ACUTE CORONARY SYNDROME DURING HAJJ PERIOD

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Abstract

Background: acute coronary syndrome refers to a group of potentially fatal disorders caused by acute myocardial ischemia, such as unstable angina, non-ST-segment elevation myocardial infarction (NSTEMI), and ST-segment elevation myocardial infarction (STEMI). Reducing morbidity and mortality requires early detection, quick risk assessment, prompt reperfusion, and medical treatment guided by recommendations. About one-third of all fatalities in people over 35 are caused by this illness, which continues to be the world's top cause of death. **Objective:** To evaluate the effect of nursing instructions on Selected outcome among patients with Acute Coronary Syndrome during Hajj period. D**esign**: A quasi-experimental design (pre/post-test non-equivalent control group) was employed. **Sample:** A convenience sample of 100 adult male and female patients was divided into two groups one of study group who receiving nursing instruction and control group who receiving hospital care. **Tools:** Three tools were utilized:(1) Demographic and Medical Data Form, and (2) Lifestyle Modification Tool, and (3) Acute Coronary Syndrome (ACS)-related complications. **Setting:** The study was conducted in cardiac ward in King Abdullah Medical City, Holy Makkah, Saudi Arabia. **Results**: The finding revealed that the mean ages of the study and control group 61.86 $\pm$12.76. and 59.36$\pm$12.9 years respectively. Statistically significant differences were found in lifestyle knowledge level observed between Study group and the control group. ($F=72.171$-$p=0.000$). Besides, there was a negative correlation between total knowledge score and complication rate of the study sample $r=.0.33$ at $p= 0.01$. **Conclusion:** The current study concluded that effective nursing instructions is very important in improving patient's knowledge regarding ACS management and reduces complication rate. **Recommendation:** Based on the study findings, it is recommended to integrate the Illustrative booklet related to Lifestyle patient knowledge into routine nursing care for patients with ACS. furthermore, continuous training should be provided for health care staff to enhance their instructional skills.

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Keywords: Acute Coronary Syndrome-Life Style Patient Knowledge -Complication Rate-Nursing Instruction.

INTRODUCTION

Cardiovascular disease (CVD) the leading cause of death globally, with nearly half of these deaths due to ischemic heart disease (Alsaidan, 2025). Acute coronary syndrome (ACS) is the major global cardiovascular diseases that considerable burden from both patient and health services over the world. It is one of the most common categories seen in many Emergency Departments (EDs), ACS is a term that describes a range of conditions related to sudden, reduced blood flow to the heart. It is the three forms of ACS include ST-elevation myocardial infarction (STEMI), non-ST-elevation myocardial infarction (NSTEMI), and unstable angina (UA). (Andhi, et al., 2022) & (Balaha, et al., 2023).

Furthermore, STEMI and NSTEMI is a heart attack happens when cell death damages or destroys heart tissue, while unstable angina occurs when blood flow to the heart decreases and consider as a major clinical challenge; as a result of atherosclerosis in the coronary arteries, where atherosclerotic plaque accumulates inside the coronary arteries, limits blood flow and, therefore, oxygen supply to the heart, is the cause of coronary artery disease (CAD). (Williams Ikram, Frates, & Theriot,2025).

The management of ACS is complex ranges from medical, surgical and nursing management that aimed to reduce chest pain, improve blood circulation, and prevention of the recurrence, which depends on appropriate patient assessment and examination by done coronary angiogram, coronary angioplasty and stent finally coronary artery bypass graft if needed after diagnostic intervention. (Lakew, Bekele, Alemu Kassa, & Dugassa Tolera,. 2023).

Nurses are seen as pivotal for effective ACS management, however nursing instructions aimed to promoting a healthy lifestyle through educated patient about as: the heart-healthy foods (DASH DIET) that are part of their diet, such as lean meats, whole grains, fruits, and vegetables , amount of fluids, encouraging the patient to exercise more than once a day should be informed start by simple exercise, important of smoking cessation as well the importance of compliance for systemic medication provides consistency among treatment protocols given to patients, resulting in improved efficacy of life style and the quality of care and reduced cost (Kazim, AbouMoussa ,& Al-Hammadi, 2023). For this reason, the current study aimed to evaluate the effect of nursing instructions on selected outcome among patients with acute coronary syndrome during hajj period.

Significance of the Study.

There is an increasing incidences and prevalence of Acute coronary syndrome as a type of CVD coinciding with increasing older people populations. In Saudi Arabia, the incidence of ACS was 8.2%. The most frequent diagnosis at the time of admission was unstable angina, followed by non-Segment elevation myocardial infarction (NSTEMI) and ST-segment elevation myocardial infarction (STEMI), representing 19.2%, 27.6%, and

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53.2% of the patients, respectively (Gagnon-Arpin, Feng, Modelling, 2021). In 2019, around 17.9 million fatalities worldwide were attributed to CHD, accounting for 32% of all deaths. Patients may have a poor quality of life, several readmissions, and difficulties engaging in social and physical activities. The WHO states that early detection and risk management are advised and that the majority of cardiovascular illnesses are avoidable (who, 2021: Alzhanova, Schadewaldt, Hendriks, & Schultz, 2026).

The prevalence of Acute coronary syndrome, additionally many studies reported the prevalence of ACS as a wide range; up to 64.8% in men and up to 68% in women. (Almotairy, et al.,2024) & (Ralapanawa, Sivakanesan, 2021). The researcher observed that the patient newly diagnosed with ACS admitted to cardiology department increased during hajj period. Also, the majority of these patients verbalized a feeling of despair resulting from less ability to perform activity of daily living and deficit in their general self-care abilities. Therefore, this study which will suggest and implement nursing instructions will hopefully enhance patient's awareness of ACS management, additionally the study findings will increase nurses' body of knowledge regarding ACS management that consequently optimizes patient's outcomes as promote life style and improve quality of care.

Operational Definition

Nursing Instructions: Nursing information about life style modification for acute coronary syndrome planned and designed by the researcher that delivered to the patient through educational session, and illustrative booklet which includes; health heart diet, physical exercise, smoking cessation, stress management and medication adherences.

Selected outcomes: In the current study selected outcomes focused on lifestyle modification which included: health heart diet, physical exercise, chest pain recurrence, dyspnea, smoking cessation, stress management, and medication adherences. (Tash, & Al-Bawardy, 2023).

Objectives of the study: To evaluate the effect of nursing instructions on Selected outcome among patients with Acute Coronary Syndrome during (ACS) Hajj period.

Research Hypothesis

H1: ACS patients who receive nursing instructions will have high knowledge mean score compared to those who receive hospital routine care.

H2: ACS patients who receive nursing instructions will exhibit low complication rate compared to those who receive hospital routine care.

METHODOLOGY

Research Design.

A quasi-experimental design (Comparison group pre/posttest design) was utilized in this study. A quasi-experimental design is an empirical study used to estimate the causal

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impact of an intervention on its target population without random assignment (Gray, Grove, Sutherland, Burns, 2017).

Setting

This study was conducted at cardiac ward in King Abdullah Medical City, Holy Makkah that provides medical care for different patients with 390 beds capacity – affiliated to Saudi Arabia.

Research Sample

A convenient sample of 100 adult male and female patients enrolled over 6 consecutive months and divided into two groups one study group and one control group 50 patients/each will constitute the study sample. The ages >18 years, have ST-elevation myocardial infarction (STEMI), non-ST-elevation myocardial infarction (NSTEMI), and unstable angina (UA), Patients who are admitted for coronary angiography (CAG). Able to communicate verbally and willing to participate in the study. Sample size determination The sample size was determined based on a statistical power calculation for a paired pre–post study design. Assuming a moderate effect size (Cohen's d = 0.5), a significance level of 0.05, and a statistical power of 80%, the minimum required sample size was estimated to be 64 participants using a paired t-test. To account for potential attrition and loss to follow-up during the Hajj period, the sample size was increased by approximately 30–40%. Therefore, the final target sample size was set at 100 participants. In addition, a convenience sampling technique will be used due to the operational constraints of recruiting Hajj pilgrims within a limited time frame and the high-risk, time-sensitive nature of the study population.

Data Collection Tools

The Following Three Tools were utilized

1.Demographic and Medical Data Form (DMDF): This was developed by the researcher and included two parts: Part I: Patient's demographic data which covers items related to age, gender, marital status, level of education, occupation. **Part II**: Medical data pertinent to medical diagnosis, body mass index (BMI), associated chronic diseases, smoking history, and current medication …...etc.

2. Life style modification tools

Life style modification tools which will be developed by the researcher: It includes main perspectives in order to explore lifestyle modification of acute coronary syndrome management as follow: a- Health Heart Diet: which includes questions related to health heart diet and daily fluid intake contain questions pertinent to importance, fluid amount take, type of food ….etc. b- Physical Exercises cover questions about performance of physical exercises, importance, appropriate time…… etc. Smoking cessation that contains questions pertinent number of cigarette smoking, ……etc, Stress Management that contain question pertinent management strategy of stress -----etc and Medication Adherences that contain questions related to patient compliance of medication …. etc.

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Scoring System

for each question "zero" indicate wrong answer about lifestyle modification that mean the patient did not know this related item while (score 1) indicates correct answer about lifestyle modification that mean knowing the related item; the higher score indicate high knowledge level while low score indicate there is low knowledge level. Satisfactory knowledge level 75%. the total score of questionnaire 10 scores divided at (0-4) indicated mild knowledge level, (5-7) moderate level of knowledge and final (8-10) high level of knowledge will undergo a structured validation process. Content validity will be assessed by a panel of three experts in Medical-Surgical Nursing, who will evaluate the instrument for relevance, clarity, wording, comprehensiveness, and format. Based on their feedback, necessary modifications will be made to improve the tool's clarity and appropriateness. The revised instrument will then be pilot tested on approximately 10% of the estimated study sample to assess feasibility, clarity, and understanding. Findings from the pilot study will be used to further refine the tool prior to its use in the main study.

3. Acute Coronary Syndrome (ACS)-related complications: The ACS-related complications assessment tool will be developed by the researchers to assess the occurrence of complications among patients with Acute Coronary Syndrome during the follow-up period. The tool will include questions related to recurrence of chest pain, development of hypertension, and presence of dyspnea. Patients will be asked whether they experienced chest pain recurrence, hypertension, or dyspnea during the follow-up period. Each item will be scored as Yes = (1) and No = (0). The total score will range from 0 to 3, with higher scores indicating greater occurrence of ACS-related complications and lower scores indicating better patient outcomes. Data will be collected through patient interviews.

Study procedures

(A)Preparatory Phase: During this phase the researcher prepared the different data collection tools after extensive reviewing of related literatures. Then, patients who meet the inclusion criteria were interviewed individually in the cardiac inpatient. At the same moment in time the nature, purpose of the current study and the ethical consideration mentioned previously were explained by the researcher to all patients under the study. After that, all patients who accept to participate in the current study were asked to sign a consent form. This phase will take 15-20 minutes.

(B)Implementation phase: In this phase the recruited participants were divided consecutively into two groups (one control group and one study group). The control group will be recruited first, followed by the intervention group, to minimize contamination bias. Both groups will be recruited from the same clinical setting using identical inclusion and exclusion criteria, data collection tools, and measurement time points to enhance consistency across groups. After that, the personal and medical data form (tool I) will be completed followed by (tool II) Life Style Modification Tool) to assess patient knowledge as a base line data for the control and study group.

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Secondly, in the same way the study group will be provide nursing instructions session included that health heart diet, physical exercise, smoking cessation, stress management, medication adherence. After that, each sample will be handled in an illustrative booklet that designed by the researcher after extensive literature/researches review. The booklet will include information related to health heart diet, physical exercises, stress management, smoking cessation and medication adherences which supported by illustrative pictures. This phase took approximately 30-45 minutes for intervention.

(C)Evaluation phase during this phase the researcher determined the effectiveness of nursing instruction for study sample will be done four time at the 1st weeks, 2nd weeks, 3rd weeks, and 4th week as stated in literature / researches review (Munawir Alhejely, Shibli, Hamed Almalki 2023) through filling lifestyle modification tool (tool II). A structured post-discharge follow-up plan will be implemented.

This will include obtaining the patient's contact information and preferred communication method prior to discharge. WhatsApp or other messaging applications will be used

Statistical Design

The data was coded and tabulated using, Statistical package for Social Science (SPSS) version 23. Data was presented using descriptive statistics in the form of frequencies and percentage…etc. Inferential tests were utilized as correlation tests and t-test…etc., Statistical significance was considered at P-value < 0.05.

Ethical Consideration

The Ethical Approval for the present study was received from (IRB) the Research Ethics Committee of the KING ABDULLAH MEDICAL CITY, Holy Makkah, Saudi Arabia with version 1.0 on 19-May 2026.

RESULTS

The aim of the current study was to evaluate the effect of nursing instruction on selected outcome among patient with acute coronary syndrome during hajj period.

To fulfill the aim of the current study, the data were collected, then tabulated, analyzed and presented into three main sections under the following titles; Section one: Descriptive statistical analysis of personal and medical related data of the study group and control groups (Tables 1- 2). Section II: Represents Statistical Analysis for Study Hypotheses between Study and control Groups at Baseline Pre-Intervention and assessment 1 at the 2^{nd} week and assessment II at the 4^{th} weeks Post Intervention (tables 3 to 6, figure 1,2).

While Section III: Represented the Correlation between Complication rate, and Lifestyle Knowledge among Study group and control groups (table 7, figure 3).

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Section I: Descriptive statistical analysis of Personal and Medical Related Data between Study and Control Groups. (Tables 1- 2)

Table 1: Frequency and Percentage Distribution of Personal Data among Study Groups and Control Group (N=100) (50/each)

	Study group (n=50)		Control group (n=50)		X2	P
	NO.	%	No.	%		
Age						
18<30	1	2.0	0	0.0	4.87	0.181
30<45	3	6.0	6	12.0		
45<60	14	28.0	21	42.0		
≥60	32	64.0	23	46.0		
Mean±SD 61.86±12.76			Mean±SD 59.36±12.9			
Gender						
Male	38	76.0	39	78.0	0.056	0.812
Female	12	24.0	11	22.0		
Level of education						
Cannot read& write	9	18.0	8	16.0	9.50	0.14
Read & write	9	18.0	7	14.0		
Primary	2	4.0	6	12.0		
Preparatory	8	16.0	2	4.0		
Secondary	11	22.0	11	22.0		
Diploma	7	14.0	5	10.0		
College	4	8.0	11	22.0		

*significant at p-value≤0.05

Table (1) clarified that the mean age ± SD of study and control groups was 61.86 ± 12.76 and 59.36 ± 12.9 years respectively. Regarding gender 76 % and 78 % of the study and control groups were males respectively.

In relation to level of education 22 % the both group study and control group are of the study group are secondary level while 22 % of the control group are secondary and college level. There were no statistically significant differences among the three groups regarding all the demographic characteristics (p>0.05).

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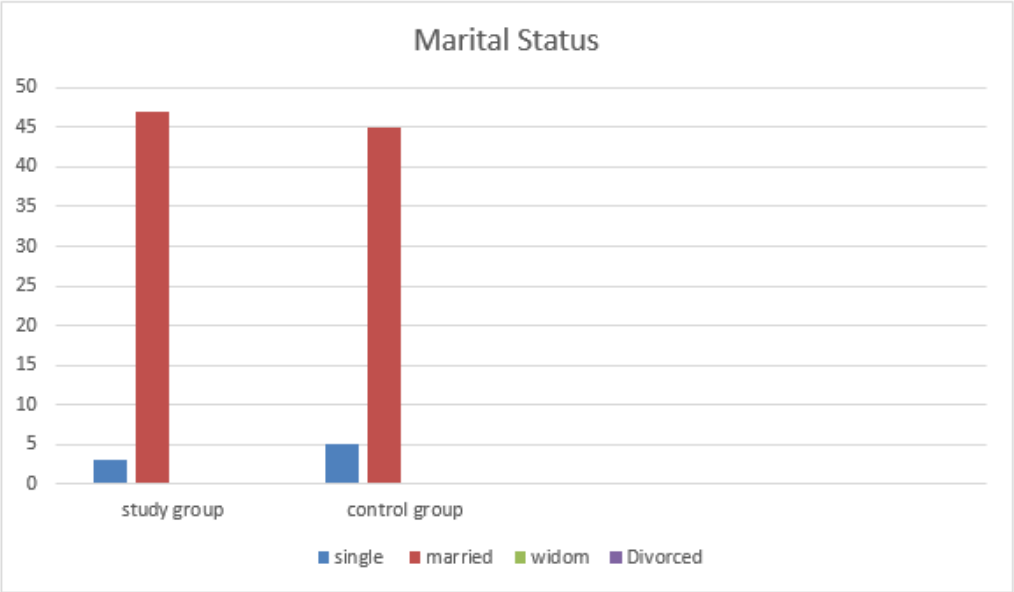


Figure1: Frequent Distribution of Marital Status among the Study Group and Control Groups

Figure1. Regarding marital status 94%, 90% of the study group and control group correspondingly were married.

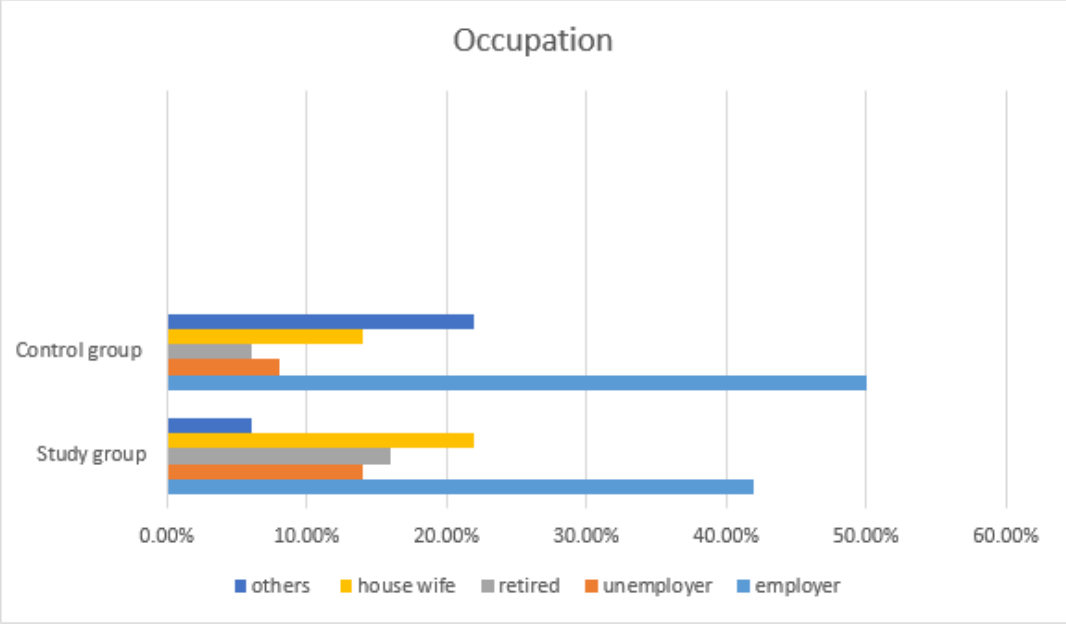


Figure 2: Frequent Distribution of Occupation among the Study Group and Control Groups

Figure 2. Illustrated that occupation 50 % and 42.0% of the control group and study groups were employed respectively.

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Table 2: Frequency and Percentage Distribution of Medical Related Data among Study & Control Groups (N= 100). (50/Each)

Variables	Study group (n=50)		Control group(n=50)		X2	P
	No.	%	No	%		
Current Diagnosis					3.78	0.52
STEMI	30	60	39	78		
Angina Pectoris	20	40	11	22		
BMI classification					3.84	0.42
Normal	12	24	14	28		
Overweight	19	38	18	36		
Class I obese	14	28	14	28		
Class II obese	2	4	4	8		
Morbid obese	3	6	0	0		
Diabetes Mellitus					0.167	0.68
Yes	29	58	31	62		
No	21	42	19	38		
Hypertension					0.4	0.841
Yes	27	54	26	52		
No	23	46	24	48		
Smoking					0.164	0.68
Non smoker	28	56	30	60		
Smoker	22	44	20	40		

Table 2 illustrated that 60.0% of the study group and 78.0% control group had a diagnosis of STEMI. Regarding classification of Body Mass Index 38.0% and 36.0 % of the study and control group respectively categorized as overweight. In relation to chronic diseases 58.0% of the study group ,62.0% of the control group had a diabetic while 54.0% of the study group,52.0% of the control group had a hypertension. Concerning smoking 56.0% and 60.0% of study and control group respectively were non-smoker. There were no statistically significant differences among the three groups regarding all the medical related data (p>0.05).

Table3: Difference between Study Group and Control Group at Three Times of Assessment

Times	Lifestyle Knowledge Level					
	Study group		Control group		t-value	P
	Mean	SD	Mean	SD		
Baseline	1.20	0.451	1.24	0.431	0.453	0.65
1st Assessment (2nd weeks)	1.86	0.639	1.26	0.443	5.455	0.000
2nd Assessment 4th weeks)	2.26	0.632	1.26	0.443	9.154	0.000

From table (3) mention that no statistically significant differences between the study and control group at baseline (t=0.453, p=0.65). Moreover, a statistically significant

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differences between study and control group at 1st assessment (t=5.455, p=0.000) and 2nd assessment (t=9.154, p=0.000).

Table 4: Compare of Means Lifestyle Knowledge at Three Different Times among the Study and Control Groups

Paired t-test / p value												
Lifestyle Knowledge	Study group						Control group					
	1st assessment (at the 2 weeks)			2nd assessment (at the 4 weeks)			1st assessment (at the 2 weeks)			2nd assessment (at the 4 weeks)		
	Mean	T	p	Mean	T	p	Mean	t	p	Mean	t	p
Baseline	-0.66	-7.092	0.000	-1.06	-12.094	0.000	02000	1.000	0.322	02000	1.000	0.322
1st assessment (at the 2weeks)				0.400	-0.534	0.000				02000	1.000	0.322

Table 4. Illustrated that, regarding lifestyle knowledge there was a statistically significance difference between base line & 1st assessment and base line & 2nd assessment as t=-7.092 & -12.094 respectively at P =0.000 also between 1st assessment & 2nd assessment as t=-0.534 at P =0.000 among the study group. While there was no significance difference between three different times among the control group as t=1.000 at P=0.3.

Table 5: Comparison of Level of Knowledge Scores within Study Group and Control Group at Three Time of Assessment

Lifestyle Knowledge level	Study group (n=50)		Control group (n=50)	
	Mean	SD	Mean	SD
Baseline	1.20	0.451	1.24	0.431
1st Assessment (at the 2nd weeks)	1.86	0.639	1.26	0.443
2nd Assessment (at the 4th weeks)	2.26	0.637	1.26	0.443
ANOVA	72.171		1.000	
P	0.000		0.322	

From table (5) mentioned that the a highly statistically significant differences were found in lifestyle knowledge level among study group and control group by using ANOVA test (F=72.171 p=0.000).

Table 6: Frequency and Percentage Distribution of Lifestyle Knowledge Level at Three Different Time among Study and Control Groups (N= 100) (50each)

Time	Baseline				Assessment I (2nd weeks)				Assessment II (4th weeks)			
Lifestyle Knowledge level	Study group		Control group		Study group		Control group		Study group		Control group	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
*Low level of knowledge	41	82.0	38	76.0	14	28.0	37	74.0	5	10.0	37	74.0
*Moderate level of knowledge	8	16.0	12	24.0	29	58.0	13	26.0	27	54.0	13	26.0
*High level of knowledge	1	2.0	0	0.0	7	14.0	0	0.0	18	36.0	0	0.0
X2	1.914				23.46				47.2			
P	0.384				0.000				0.000			

Regarding lifestyle knowledge level at the 2nd and 4th week; table 6 clarified that after nursing instructions in the 2nd week follow up 58.0% of the study group had moderate level of knowledge and the second 14.0% of the same time had high level of knowledge; while 74.0% of the control group had low level of knowledge at the same time. In the 4th

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week during the assessment 2nd follow up 54.0% of the study group had moderate level of knowledge and the 36.0% of the study group had high level of knowledge at the same time. While74.0 % of the control group had low level of knowledge. There was a statistically significant differences were found in lifestyle knowledge level among the study and control group at three time of assessment (Baseline: x2=1.914, p=0.384,1stassessment: x2=23.46, p=0.000, 2nd assessment: x2=47.2, p=0.000) respectively.

Table 7: Relation between Lifestyle Knowledge Level and Complication Rate Score among the Study & Control Groups

	Lifestyle Knowledge Level			
	Study group(n=50)		Control group (n=50)	
Variables	r	P-Value	r	P-Value
Complication Rate	- 0.33	0.016	0.18	0.211

Table 7. Illustrated that, there was a statistically significant negative correlation between Lifestyle knowledge level and complication rate in the study group (r=0.33, p=0.016)

DISCUSSION

Cardiovascular diseases are a serious global health issue that poses a significant burden on both patients and health services worldwide. Acute coronary syndrome (ACS) remains a major cause of morbidity and mortality worldwide. The discussion of the current study is presented in three sections: Section One describes the personal and medical data. Section Two provides an analysis of the study hypotheses, and Section Three discusses the correlation between study variables.

Section One

The present study found no statistically significant differences between the study group and the control group in all personal characteristics. The mean age ± SD of the subjects was (61.86 ± 12.76 and 59.36 ± 12.9 years) respectively This finding is consistent with (Goyal, Haque, Bar, Das & Chatterjee, 2025). who reported the linkage between ACS and age.

In relation to gender, the current study illustrated that the majority of the studied subjects were males. This finding is consistent with (Pratesi, 2024). this is previous study reporting a higher incidence of ACS more frequent in men up to the age of 65 however, evidence also suggested that the incidences of ACS increases among female after menopause, due to cardio metabolic and hormonal protection decreases in women. From the researcher point of view, the incidence of ACS more common in male due to unhealthy lifestyle behaviors such as smoking.

Regarding marital status, the majority of the studied subjects were married. These findings are consistent with research conducted by Moradi, et al., (2025). which highlighted that the majority of the subjects studied were married. One possible

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interpretation for this finding could be that ACS often affect older adults, when marriage is more common.

Concerning patients' education, the present study found that approximately one fifth of the patient's had a secondary level of education. Despite the relatively moderate education background of the study patient, a high level of knowledge was observed. This result agreement with study conducted by Moturu, et al, 2026. My researcher opinion this finding may suggest that patient knowledge is not solely determined by their formal education level.

Regarding medical data, the majority of the studied subjects had diagnosis of STEMI. This finding consistent with Sheng, & Chen, (2025). who noted the incidence of ACS in-hospital mortality did not significantly differ between STEMI and NSTEMI, the study further emphasizes the importance of individualized treatment strategies based on myocardial infarction type.

Concerning BMI, around one third of the subjects in the present study were overweight. This finding is supported by Simioni, et al., (2026)who highlighted that Obesity increases the risk of developing acute coronary syndrome (ACS).

Section Two

The statistical analysis of the current study indicated that the study hypothesis was accepted, as statistically significant differences were observed between study group (intervention group) and the control group (hospital routine care) regarding lifestyle knowledge.

There was an improvement in patient knowledge level among study group compared to the control group at the first assessment at the 2nd week and second assessment at the 4th weeks. This could be attributed to the effectiveness of nursing instruction in improving the total mean of patient knowledge level. This finding aligns with Sockalingam, et al.,. 2021: Johnson, et al, 2021) & (Busco et al., 2026). who revealed that providing patients instruction on ACS is extremely valuable to enhance patient awareness and lowers risk for cardiovascular complications.

The current study also supported by Nilamsari, Susilo, Ratri & Bawole, (2025). Who reported that nursing instruction is play a crucial role in improving lifestyle knowledge among patient with ACS which included healthy diet, physical exercise, smoking cessation, stress management, and medication adherence. educating patients can improve their quality of life, prevent re-hospitalization, and increase therapeutic outcomes.

Moreover, the study findings revealed that highly statistically significant differences were observed between study groups and control group regarding lifestyle patient knowledge. Consequently, the patient's better adherence to their prescribed medication and improve stress management practices, also enhanced patient awareness and knowledge health-related quality of life.

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Section Three

In relation to the correlation between patient knowledge and complication rate, the current study findings that significant negative correlation between patient knowledge and complication rate. This might have emphasized the importance of the instructions and patients care provided by the researcher as self-care activities, such as increasing their physical activity, mobility levels, this finding is in agreement with (Chiang, Choi, Ho & Yu, 2018). who stressed the patient awareness of physical exercise, healthy diet, smoking cessation, stress management and medication adherences.

CONCLUSION

The current study came to the conclusion that good nursing instructions are crucial for raising patients' awareness of ACS care and decreasing the rate of complications and improve the patient quality of life.

Recommendation

The Illustrative booklet on lifestyle patient awareness should be incorporated into routine nursing care for patients with ACS, according to the study's findings. Additionally, health care workers should receive ongoing training to improve their teaching abilities.

Conflict of Interest

The authors declare that they have no conflict of interest.

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