Review Form 1.6

Journal Name:	**Cardiology and Angiology: An International Journal**
Manuscript Number:	**Ms_CA_87105**
Title of the Manuscript:	**Epidemiology of pacemaker implantation among patients in Tanta university hospitals**
Type of the Article	**Original Research Article**

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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	Reviewer's comment	Author's comment *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Compulsory REVISION comments	This MS has an interesting topic; however, in its current form, it is difficult to follow, and thus, it requires a major revision. In the Methodology, the inclusion/exclusion criteria of the study need to be provided in detail. Also, the terminology for mode of **pacemaker implantation** (e.g., DDD, VVI, CRT-D) should be explained. Abbreviations (e.g., LBBB, LV, HTN, DM, CIED, etc.) should be explained, and then, used consistently in the article. The Discussion is written in a disorganized way, which needs to be corrected. The Abstract and the Conclusion should be rephrased, to be more useful for clinicians. Some suggestions for the Abstract and the Conclusion are provided. The whole MS should be modified accordingly.	
	Abstract [it should be] **Background:** Cardiac pacemakers have become the common treatment option for symptomatic bradycardia or high-grade atrioventricular block. However, knowledge about recent cardiac pacing activity and characteristics of patients undergoing these procedures is still limited. **Aim:** This study was conducted to describe demographic data of patients, who underwent permanent pacemaker (PPM) implantation, their risk factors, clinical presentations, indications, mode of pacing, and complications post PPM implantation, during 2021. **Methods:** The study was carried out at the department of cardiology at Tanta University Hospitals [where? - please, put the country name] 102 patients were included in this study. This study was done over a period of six months from October 2020 until April 2021 and follow up for 6 months. All the data about the patients, who underwent PPM implantation were collected by the study coordinator in the participating cardiac center. **Results:** The most frequent risk factors of PPM implantation were hypertension (HTN) (69%), followed by diabetes mellitus (DM) (29%), coronary artery disease (CAD) (21%), chronic kidney disease (18%), hypothyroidism (6%), cardiomyopathy (3%), valvular heart disease (2%) and congenital heart disease (1%). The most common indication was complete heart block (69%), followed by second-degree heart block "Mobeitz type 2" (13%), slow atrial fibrillation (AF) (7%), symptomatic heart failure (HF) with LVEF ≤ 35% , QRS ≥ 150 ms (6%), trifascicular block (3%), sick sinus syndrome (SSS) (2%). The most frequent mode of pacing used in our study was DDD mode (63%), followed by VVI mode (32%) with (78%) sinus rhythm and (22%) atrial fibrillation rhythm, then CRT-D (4%) [explain the abbreviations]. The overall complication rate was 9% within 6 months. In our study, the most common complication was infection (5%), followed by haematoma (1%), lead fracture (1%), pneumothorax (1%), and lead displacement (1%). **Conclusion:** Approximately three-quarters of the patients with atrioventricular blocks underwent PPM implantation. More than half of the patients underwent PPM implantation with dual-chamber pacemakers. Infection was the most common complication in our study, and thus, it is important to implement very strict infection control measures. Having a better insight into the patients' risk factors would allow a better triage of patients who could benefit from PPM implantation. **Conclusion [it should be]** This study provides important results of PPM epidemiology at Tanta university hospitals [where? - please, put the country name] after the publication of the recent cardiac pacing guidelines [issued by which institution?], in 2021. Factors like age and comorbidities determined the likelihood of pacemaker implantations. Approximately three-quarters of the patients with atrioventricular blocks underwent permanent pacemaker implantation. More than half of the patients underwent permanent pacemaker implantation with dual-chamber pacemakers. Infection was the most common complication in our study, and thus, it is important to implement very strict infection control measures. Having a better insight into the patients' risk factors would allow a better triage of patients who could benefit from its implantation.	
Minor REVISION comments	This MS requires improvements – a native speaker editorial service is needed	
Optional/General comments	In the whole text, rephrasing/editing for clarity/style is necessary [for example, different sentences should be corrected grammatically & abbreviations should be used properly in the abstract & in the text]. A list of abbreviations should be placed at the end.	

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<mark>PART 2:</mark>

	Reviewer's comment	Author's comment *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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