

# **Factors Affecting Compliance of Patients With Permanent Pacemaker Regarding Therapeutic Regimen**

**Thesis**

*Submitted for Partial Fulfillment of  
The Master Degree*

*In*

*Nursing Sciences  
(Medical –Surgical Nursing)*

**By**

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Ain Shams University  
2013**

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**Reham Adel Ebada El Sayed**

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## *List of Abbreviations*

<b>ADLs:</b>	Activities of daily living
<b>AF:</b>	Atrial fibrillation
<b>ANA:</b>	American Nursing Association
<b>AVN:</b>	Atrioventricular node
<b>B/min:</b>	Beats per minute
<b>BP:</b>	Blood Pressure
<b>CPR:</b>	Cardio pulmonary resuscitation
<b>CVS:</b>	Cerebro vascular stroke
<b>ECG:</b>	Electrocardiogram
<b>EMI:</b>	Electromechanical interference
<b>G:</b>	Gram
<b>Hrs:</b>	Hours
<b>IV:</b>	Intra venous
<b>MRI:</b>	Magnetic resonance imaging
<b>MI:</b>	Myocardial infarction
<b>PPM:</b>	Permanent Pacemaker

*List of Abbreviations (Cont.)*

- ROM:** Range of motion
- SAN:** Sainoatrial node
- SSS:** Sick sinus syndrome
- SVT:** Supraventricular tachycardia
- VSD:** ventricular septal defect
- WHO:** World health organization

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## **Operational Definition**

**Permanent pacemaker:** is a medical device that uses electrical impulses, delivered by electrodes contacting the heart muscles, to regulate the beating of the heart. The primary purpose of a pacemaker is to maintain an adequate heart rate, either because the heart's native pacemaker is not fast enough, or there is a block in the heart's electrical conduction system.

**Compliance:** is the extent to which a person's behavior coincidence with health related advice and includes the ability of the patient to do the following health care behaviors attending clinic appointments as scheduled, taking medication as prescribed, making recommended life style changes and completing recommended investigations.

**Therapeutic Regimen:** is a systemic treatment course or plan directed toward improvement of health. Such a plan is likely to consider drug, diet, exercise, follow-up, self-monitoring skills and general instructions to prevent complications.

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## **Theoretical Definitions**

### **Personality traits:**

**Extraversion:** It is characterized by positive emotions and refers the extent to which a person is sociable, talkative, lively, active, and excitable. A highly extraverted person enjoys interacting with people, and is often perceived as full of energy. They tend to be enthusiastic and action-oriented individuals (Gorman & Sultan, 2008).

**Openness to experience:** It is a general appreciation for art, emotion, adventure, unusual ideas and refers to the extent to which a person is curious, imaginative, independent, and has a preference for variety. A person who is high in openness to experience would be a creative thinker, independent and does not like routines (Gorman & Sultan, 2008).

**Conscientiousness:** It is a tendency to act dutifully, and aim for achievement against measures or outside expectations and refers to the extent to which a person is organized, careful, self-disciplined, and responsible. A person who is high in conscientiousness would make an effort to be careful, organized, and responsible. The trait shows a preference for

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planned rather than spontaneous behavior (**Gorman & Sultan, 2008**).

**Agreeableness:** It refers to the extent to which a person is good-natured, helpful, trusting, and cooperative. A person who is high in agreeableness would be caring, help others, trust others, and strive to be cooperative in groups. They are generally considerate, friendly, generous, helpful, and willing to compromise their interests with others. Agreeable people also have an optimistic view of human nature (**Gorman & Sultan, 2008**).

**Neuroticism:** It is the tendency to experience negative emotions, such as anger, anxiety, moodiness, irritability, sadness or depression. It is sometimes called emotional instability. Individuals high in neuroticism are emotionally reactive and vulnerable to stress. They are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult (**Gorman & Sultan, 2008**).

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## *Abstract*

Optimal outcome after permanent pacemaker can only be obtained if patients are supported in complying with therapeutic regimen. Several factors affect patient's level of compliance. These factors include type of therapy, patient's own condition, health team, social and financial support patient's psychological condition. **Aim:** This study aims to assess the factors affecting compliance of patients connected with permanent pacemaker regarding therapeutic regimen. **Methods:** this study was conducted at the cardiac outpatient clinics at Ain Shams University Hospital. **Sample:** A purposive sample of 85 adult patients, with permanent pacemaker within six months from insertion, who agree to participate to this study. **Tools:** 1) patient's compliance assessment sheet to assess compliance with therapeutic regimen. 2) Patient's interview questionnaire to assess factors affecting compliance. **Results:** the present study revealed that most of the sample (83.5 %) were non compliant with therapeutic regimen. Furthermore, there were significant relation between patients' compliance and age, educational level, residence, presence of co-existing diseases, patients' level of knowledge, patients' believes and medical team- patient relationship. While, there were highly significant relation between patients' compliance and physical, economic, psychological, and social factors. **Conclusion:** the factors that were significantly affect patients' compliance were age, educational level, residence, presence of co-existing disease, patients' knowledge, patients' believes, patient- medical team relationship, physical factors, financial factors, health care system related factors, psychological factors, and social factors. **Recommendations:** Patients and their families should be provided with adequate knowledge about permanent pacemaker and the importance of proper compliance to therapeutic regimen.

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**Key words:** Compliance, Therapeutic regimen, Permanent pacemaker.