INTRODUCTION

Pharmacoeconomics concerns the application of the methods of economic evaluation of health care programs to interventions involving pharmaceutical products\(^1\). The purpose of the methods, and the studies, is to help inform programmatic decision-making regarding the appropriateness and availability of health care interventions including drugs. Results of such programmatic decision-making (e.g. formulary listings, clinical guidelines, appropriate prescribing practices) will often impact on treatments for individual patients. The need to use more complete information in decision-making is reflected in the growing number of pharmacoeconomic guideline documents in the literature\(^2\). Pharmacoeconomic studies compare the costs and consequences of pharmaceutical products with relevant alternatives. These studies are pertinent to the decision-making process when trying to balance additional costs associated with one alternative over another, versus their respective differences in clinical outcome. The overall technical goal of pharmacoeconomics is to identify treatments and drugs which may be worthy of support, such that the overall good that is done is maximized (or equivalently, the opportunity costs incurred are minimized) within the constrained resources available. Pharmacoeconomic studies in their proper role are used to inform decision-making, not to replace it. The studies are not to be used in a thoughtless, mechanistic fashion. They do not replace hard thinking, careful consideration, good judgement and common sense. When properly used and properly qualified, they provide essential information as input into the decision-making process. They are not the only input, however; other considerations such as justice, equity, access, choice and process factors also come into play.

India is economical country. Single vessel blockage population who had acute coronary syndrome or stable angina, There are various treatment available for that including stent Drug eluting stent, non drug eluting stent, Medication therapy, but the cost of stent is too high that economically weak patient cant effort so there is also medication therapy available for patient. Here Our study will show difference between medical therapy and stent therapy, we will measure Clinical outcomes, quality of life, difference in survival or quality adjusted survival. The present economic analysis showed that stent therapy plus medical therapy was more expensive than medical therapy alone, almost because of the initial cost of the procedure. Here
we will estimate for the ICER (INCREMENTAL COST EFFECTIVENESS RATIO) for stent and medication therapy patients.

CAD can be treated by either of these methods Percutaneous Transluminal Coronary Angioplasty (PTCA), Coronary Artery Bypass Graft surgery (CABG), Percutaneous Coronary Intervention (PCI). PCI refers to both nonstenting procedures and stent interventions. The introduction of percutaneous Transluminal coronary angioplasty (PTCA) in the 1970s provided a revascularization alternative to coronary artery bypass graft surgery (CABG). However, angiographic restenosis occurred in approximately 40 percent of patients at percutaneous coronary intervention (PCI) refers to both nonstenting procedures and stent interventions. The absence of recurrent symptoms in the remaining patients can be related to a variety of factors including lesion severity, collateral blood supply, and a lower level of exertion, silent ischemia, and prior Myocardial Infarction (MI).

Thus, 20 to 30 percent of patients required clinically driven repeat target lesion revascularization within the first year after PTCA. Later restenosis is uncommon as recurrent ischemia after a year is most often due to a new or progressive lesion; still after the restenosis period, the target lesion remained stable or regressed.

The introduction of bare metal stents (BMS) produced a significant improvement in the durability of balloon angioplasty as the rate of angiographic restenosis fell to 20 to 30 percent and the rate of target lesion revascularization to 10 to 15 percent. BMS also produced better short-term results such as less residual stenosis, elimination of dissection, and lower rates of in-hospital CABG and myocardial infarction. As a result, BMS replaced nonstent interventions (PTCA and Atherectomy) for most patients.

Drug-eluting stents (DES) were developed in an effort to further reduce the rate of restenosis and, accordingly, target lesion revascularization. DES consist of a standard metallic stent, a polymer coating, and an anti-restenotic drug (e.g., sirolimus or paclitaxel) that is mixed within the polymer and is released over a period as short as days to as long as one year after implantation to reduce the local proliferative healing response.

After years of unsuccessful attempts to prevent post-PCI restenosis by the systemic delivery of anti-proliferative drugs, coronary brachytherapy, in the late 1990s, became the first effective
treatment of in-stent restenosis. However, it is associated with considerable logistic challenges, requires collaboration among several scientific disciplines in the catheterization laboratory, and is ineffective for indications other than in stent restenosis. Most importantly, it became rapidly apparent that irradiated coronary artery segments are at high risk of acute, sub-acute or late stent thrombosis, since the irradiation hampers subsequent re-endothelialization.