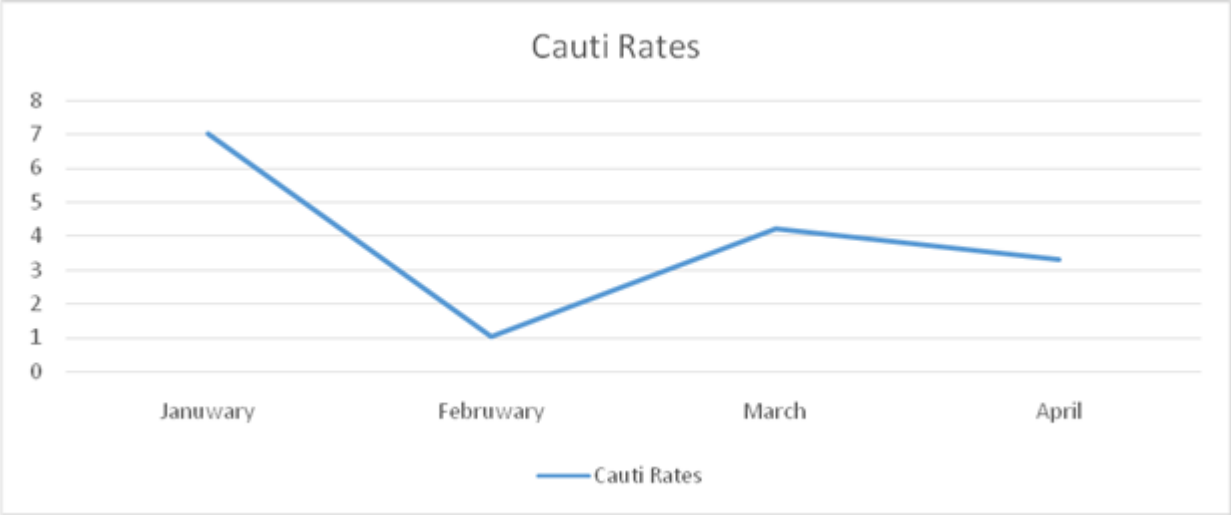
Introduction:

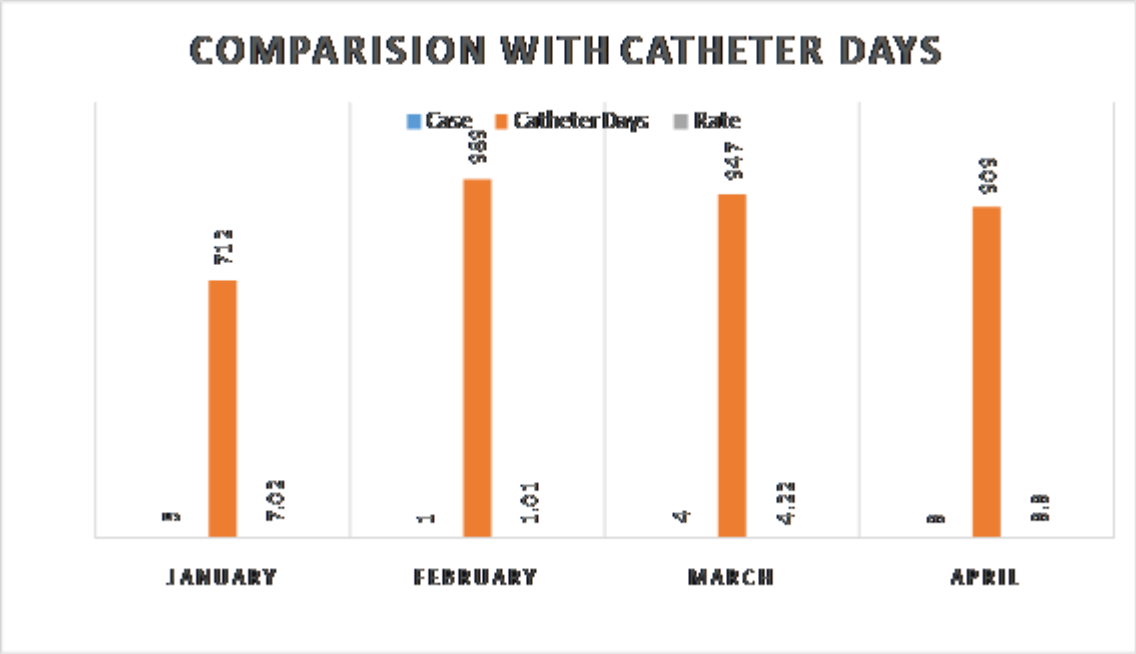
Catheter associated urinary tract infection is an important cause of mortality and morbidity. Its incidence in India as per available study is 22.22%(Col Shivinder Singh et al, medical journal armed forces India,2013) among all nosocomial infections. Its burden on healthcare is immense. With changing time and increasing no of hospital beds worldwide, which subsequently increasing the no of patients being catheterized,it's now more relevant to address this menace with new techniques.

Material and method:

All patients with a urinary catheter were enrolled in the study from 15th January'2017 till 30th of April '2017 and data's were collected. Apart from maintaining the standard CAUTI bundle suggested by CDC, we have introduced one simple intervention in our cauti prevention bundle. That is application of 1.0% chlorhexidine gel every 6 hourly. The gel is applied over the outer surface of urinary catheter starting from meatal part proximally to the catheter fixation part distally to the urobag. The calculation of cauti is done using the following formula.

$$\text{CAUTI Rate} : \quad \frac{\text{Number of cauti in the month}}{\text{Number of Catheter days}} \times 1000$$





Starting with a CAUTI rate of 7.02% , the rate declined to 1.01% within a month and sustained at 4.22% and 3.3% in the subsequent months.

Discussion:

Significant serious efforts are being made world wide to decrease this nosocomial problem. There are good guidelines made available by various bodies , especially CDC in curbing this problem. New research are still going on in this area. There are studies which shows effectiveness of antimicrobial urinary catheters (Johnson JR, Systemetic review,Ann Intem Med,2006) but these are costly. One systemic review concludes that this of course decreases the catheter associated bacteriuria and funguria (Drekonja DM,Expert review med devices,2008) but there is variable evidences and future studies are recommended. In our study we emphasized on using a very simple and cheap method and the results are encouraging. There is significant drop in the incidence of CAUTI as illustrated in the figures.

Conclusion:

We therefore conclude that application of chlorhexidine gel(1%) on urinary catheter has a positive impact on decreasing CAUTI rate. We are currently continuing the method and in future will come up with more elaborate analysis.

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