Launch of Diabetic Care Plan with Interactive Indicator software to Improve Patient Compliance

AUTHORS
Sadaf Majid* MBBS, ABQAURP, MPH, Farah Ansari Naz* MBBS, MRCP, MRCGP, Javeria Khan* MBBS, Muhammad Inam ul Haq* MD

OBJECTIVE
- To improve patient’s compliance for diabetic treatment.
- To monitor bloods such as HBA1c, albumin, creatinine, cholesterol regularly.
- To Implement diary management for timely follow up.
- To provide standardized diabetic education.

BACKGROUND
The global burden of type 2 diabetes (T2DM) is on increasing trend, particularly, in economically developing countries [1]. Epidemiological studies suggest that, without effective prevention and control programs, T2DM is likely to continue to increase globally [2, 3]. Regular clinical and biochemical monitoring of patients, adherence to treatment and counseling are keystones for prevention of complications. In order to achieve maximum results in prevention, treatment and patient education, a proper diabetic care plan is needed to develop.

PLANNING/IMPLEMENTATION METHOD
Seeing the complication of diabetes and low compliance with treatment and education of patients, it was decided to initiate an effective diabetic care plan. Initially an audit was conducted in diabetic OPD clinic to evaluate the service utilization, treatment adherence, education of patients and follow up in clinics. After the results of audit, it was planned to formally establish a diabetic care plan. Our team then created an interactive dashboard for nursing team to monitor disease indicators and to take appropriate actions in timely manner. This diabetic care plan was formally launched after the development of dashboard in June 2022.

RESULTS
Initial audit was conducted in January 2022 on 450 patients. Results showed multiple areas which needed improvement such as reminder about follow up, need for disease education and prevention of secondary complication.

After the implementation of diabetic care plan, the data is encouraging and shows significant improvement in all parameters. Currently, there are 369 patients enrolled in the diabetic care plan till date, with 189 males and female 180 having male to female ratio of 1.05.
After the implementation of diabetic care plan, the status of indicators is much upgraded as shown in table 1.

<table>
<thead>
<tr>
<th></th>
<th>HbA1c</th>
<th>Cholesterol</th>
<th>Creatinine</th>
<th>Education</th>
<th>Follow up adherence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before diabetic care plan N=450</td>
<td>208 (46.2%)</td>
<td>89 (19.7%)</td>
<td>217 (48.2%)</td>
<td>0</td>
<td>91 (20.2%)</td>
</tr>
<tr>
<td>After Diabetic care plan N=369</td>
<td>246 (66.7%)</td>
<td>161 (43.63%)</td>
<td>250 (67.73%)</td>
<td>359 (97.2%)</td>
<td>326 (88.3%)</td>
</tr>
</tbody>
</table>

Table 1: Indicator details before and after implementation of diabetic care plan

Indicator sheet helped nursing team not only in monitoring of individual patient’s progress but also in overall evaluation of care plan. Color coding system helped team in demarcation of patients in high and low risk categories not only in terms of compliance but also in terms of disease progression.

Figure 1: Diabetic care plan enrollment screen
CONCLUSION

Diabetic care plan improves the process of diabetic care and patient's compliance towards treatment and education

REFERENCE