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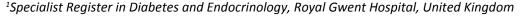
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ORIGINAL ARTICLE

# The Novel Use of a Group Event for Young Adults with Diabetes to Promote Completion of Essential Diabetes Checks and Diabetes Education

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#### Keywords

Young adults, Diabetes, Diabetic education, Diabetic checks, Group learning, Diabetes questionnaire

#### **Background**

Management of diabetes in young adults (aged 16-24 years) brings a unique set of challenges and considerations that require further scrutiny. Diabetes is a chronic condition and having the right care early on is essential for good health and future well-being. 1 in 3 and 3 in 4 young diabetics develop nephropathy and retinopathy in their early 20s. Majority of these complications occur within 8 years of their diagnosis of diabetes. A study done in the U.S showed that only 17% of early young adults (ages 18-25) and 30% of late young adults (ages 26-30) with diabetes were able to achieve glycemic control [1]. Longitudinal follow up studies have shown that up to 50% of young diabetics develop diabetes-related complications in their 20s [2]. The risk of developing long term complications such as retinal, renal and nerve complications are reduced by close monitoring (annual review checks), adequate treatment with insulin and patient education tailored to an individual needs. Despite these critical health and psychosocial concerns, there is a notable lack of evidence-based clinical services and support for young adults

with diabetes.

The transition from paediatric to adult care services for chronic conditions including diabetes is poorly managed in most units and is carried into young adulthood [3]. A literature review in July 2010 of 10 studies showed that the most commonly employed approaches to improve the attendances in young adult clinics was patient education [1]. Although effective initially, the clinics see a steady decline in attendances as time progresses and increased disengagement by the patients in these clinics [4].

Traditional young adult clinics have been shown to have limited impact and not 'fit for purpose'. Although help is available in young diabetic clinics, most often they are expected to take control and responsivity of their diabetes and overall health. A high attrition rate of patients failing to attend these clinics is noted. The challenges faced by young diabetic individuals are many [5] and it becomes tricky as they are in an unstable period of development. Some of the challenges include changes in lifestyle like education, jobs; changing and evolving inter personal relationships with family members, partners, friends; and adapting to the constant and sometimes complex changes in their treatment. This has led to poor control of patient's diabetes and adverse outcomes on their health. Although it is quite clear that



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an alternative approach is needed, there is a paucity of data based on which changes to an existing system can be made [1].

It was strongly felt that an alternate approach could have the potential to change the current care being offered to young adults with diabetes. We undertook a novel group event for Young adults with Diabetes at the Royal Gwent Hospital to promote completion of essential Diabetes checks and to promote diabetes education. Royal Gwent Hospital, Newport is a district general hospital supporting nearly a population of 6,60,000. We have a dedicated consultant led young adult clinic.

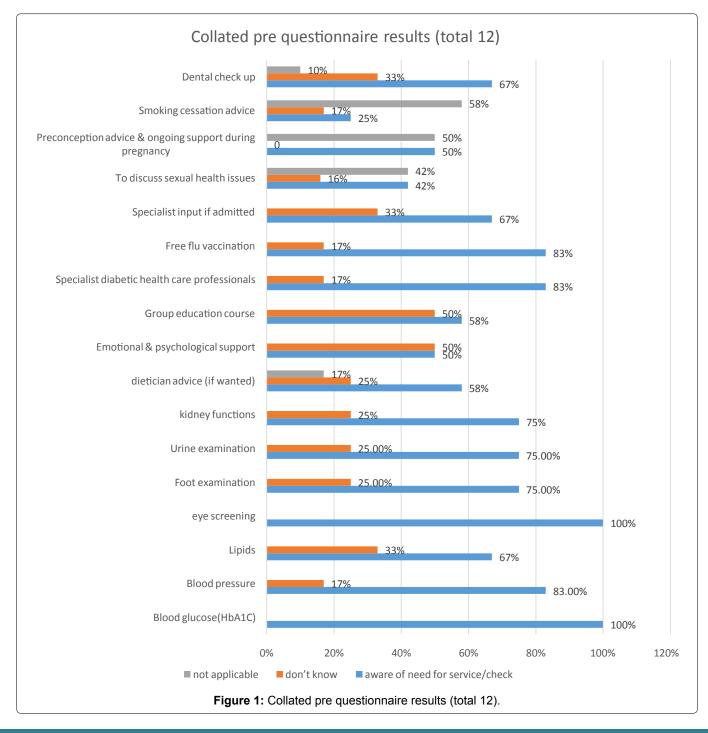
# **Objective**

To use Group learning event as an opportunity to

bring young people with diabetes together, improve patient education, peer to peer learning of common themes, assess the satisfaction of the participants with regards to the services being offered and completion of Diabetes annual review checks. The event was conducted in the afternoon over 3 hours with refreshments being offered.

## **Method/Description**

A day was picked and invitation was extended via email/post requesting the participants to attend the event. On arrival a pre-session questionnaire regarding 15 diabetic essential checks was requested to be completed. This was to ascertain the participant's knowledge of these essential checks. This was followed by small talks regarding themes relevant to young adults like drinking, sexual health, pre-pregnancy counselling, sick



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day rules to prevent ketoacidosis, lifestyle and dietary advice.

The diabetic professionals involved included consultants, registrars, dieticians, podiatrists, diabetic specialist nurses, diabetes UK volunteers and diabetic nurses working in the community.

A post session questionnaire containing the same 15 diabetic essential checks was requested to be completed to know if the participants had understood the importance of these essential diabetic checks and feedback about how to improve the delivery of future events.

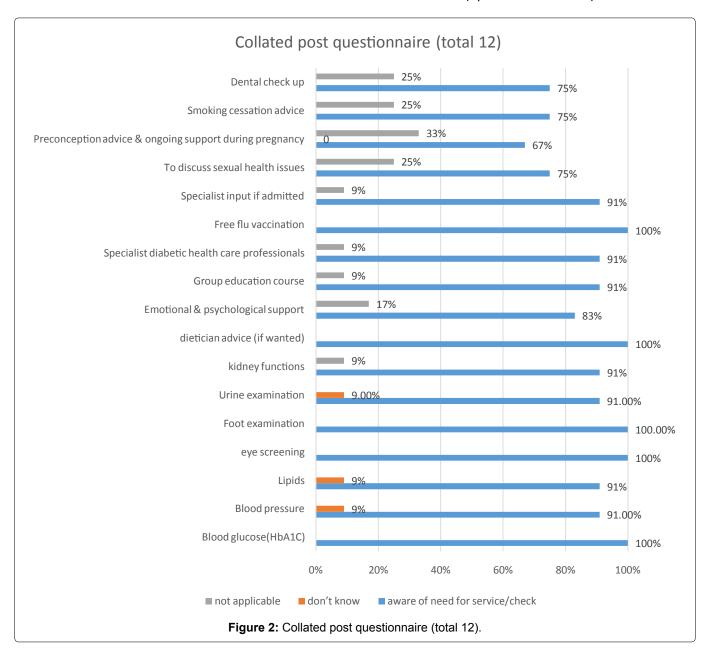
Each individual also had a brief encounter with a Diabetes team member to complete their annual review checks.

### **Result/Outcome**

(Figure 1 and Figure 2).

### **Analysis**

A total of 12 patients attended the event. The overall satisfaction score with regards to the services being provided was 4.5/5. There was a significant improvement in the participants understanding of the need and importance of all of the essential diabetic check list. This was evidenced by a significant improvement in the post questionnaire service awareness percentages in all areas. The importance of eye screening and blood glucose monitoring was 100% in both the pre and post questionnaire survey. There was a 50% increase in the awareness percentages with regards to smoking cessation advice (up from 25% to 75%).



The other areas where there was significant improvement were as follows (a) Dental checks (up from 67% to 75%), (b) Importance of preconception advice and support during pregnancy (up from 50% to 67%), (c) Sexual health issues (up from 42% to 75%, importance of flu vaccination (up from 83% to 100%), (d) Enrolling in a group education course (up from 58% to 91%), (e) Emotional and psychological support (up from 50% to 83%), (f) Importance of dietician support (up from 58% to 100%, (g) The importance of monitoring kidney functions (up from 75% to 91%), (i) Foot examinations (up from 75% to 100%).

The pre and post questionnaire's helped in understanding where more focus and emphasis was required in relation to the diabetic essential checks. 100% completion rate for the 16 Diabetes annual health checks was achieved by the Diabetes team for all the patients who attended the events. The participants were able to engage with all the members of the diabetic team.

#### **Conclusions**

A group learning event provides an excellent alternative option of delivering improved care processes for young adults with Diabetes particularly where traditional clinic models have not been effective. According to a report, only one quarter of young diabetic individuals attain the glycaemic control level of < 58 mmol/mol. Only a similar proportion of patients received all the diabetic care processes and there was great variability in diabetic services provided in different units [6].

Our experience has showed that there was a very good positive response from the participants. The young patients who attend young adult clinics usually go through complex challenges in their lives which includes social, inter personal, familial, cognitive and emotional changes [7]. A grouped session provides an excellent opportunity where they can mingle and have their queries addressed and listened to. It also provides a good platform for the diabetic team to get feedback from the participants regarding the improvements that can be

made in the delivery of diabetes care. The talks regarding topics relevant to young adults like social drinking, driving etc were also well received. Due to the significant pressure on time in clinics, all the relevant themes cannot be fully addressed in the short time allocated for each patient. The group sessions allowed the patients to talk among themselves and have their concerns and queries addressed comprehensively by the dedicated diabetic team.

The event also resulted in grouped annual review of 16 key diabetic checks and could result in reduced pressures on the young adult waiting lists. Organizing the event involved a lot of coordination form different members of the diabetic team. We are very hopeful regarding the future success of the event and are promote and pursue it full heartedly. The findings were also presented in our health boards research and development conference and it was well received.

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