Part II- PICOT Diabetes Self-Management Education

Affiliation

Date

Section 5: Literature Critique and Identification of Gaps

Diabetes self-management education is an essential element of care for all people that live with diabetes and those that are found to be at risk of developing it (Fain, 2017). It is essential to understand that if the American society is to delay or prevent the complications of diabetes, then they have to look at various lifestyle elements that are related to changes in lifestyle which is also very essential among individuals with pre-diabetes as an ongoing effort for the prevention of the disease. According to Cunningham et al., (2018) quality Diabetes self-management education is needed to ensure quality and support to help the diabetes educators in ensuring the provision of evidence-based education and self-management support. The standards are essential as they apply to educations in private practice and those that are situated in different multicentered programs, including every other individual within the program (Grady & Gough, 2014). There are several relevant models for the implementation of Diabetes self-management education and support. These standards are not supported to look at a single approach but will be focussed on delineating the standard practices among the excellent and effective Diabetes selfmanagement education strategies. They are thus standards that can be used in the areas of accreditation and recognition they also provide for the right guidance for the non-recognized, non-credited providers and healthcare programs (Reyes, Tripp-Reimer, Parker, Muller, & Laroche, 2017).

Diabetes self-management education was also influenced by other factors apart from the regular healthcare proactive, and it includes the social, economic, and cultural practices. For example, Cunningham et al., (2018) found that the Type 2 diabetes was responsible for the

growing morbidity and mortality issues whereby 2015, about 9.4% of the united states population were diagnosed with diabetes, about 95% of those diagnosed also it was found, had Type 2 diabetes (Cunningham et al., 2018). The author argues that most case type 2 diabetes is associated with Microvascular complications that include neuropathy, retinopathy, and nephropathy. Among the highest types of risk for Type 2, Microvascular complications will include peripheral arterial disease, artery disease, and healthy. In present times, type 2 diabetes is also regarded as the seventh leading cause of death in the United States. Also, there are racial and ethnic disparities that play around type 2 diabetes morbidity and mortality in the country, which is common among African Americans (Mardanian Dehkordi & Abdoli, 2017). Current about 12.7% of African Americans have been diagnosed by Type 2 diabetes. This is because they are less likely to have control over HbA1c than the non-Hispanic whites (Mardanian Dehkordi & Abdoli, 2017). Low-income groups are also more likely to develop nephropathy and retinopathy complication, which means that they may likely to be hospitalized with complications associated with diabetes Lavelle et al., (2016).

According to Weaver, Lemonde, Payman, & Goodman, (2014) Diabetes self-management Education will mean that people with the social, economic and cultural challenges will be able to conduct the required blood glucose monitoring, administering of medications, physical activity, management of diet and continued medical care. One of the main goals for Diabetes self-management Education is to ensure that the patient can control their Haemoglobin A1c (HbA1c) that is a significant determinant of the average blood glucose in a couple of months. There is a lot of demand to ensure the management of this complex condition, which has also affected the different decisions regarding the Quality of Life. Wooley & Kinner, (2016) adds that Diabetes self-management Education will look at the different demands in the quality of life that include the

emotional, physical, and social wellbeing of the individuals. Most of these patients also report a lower quality of life than those without chronic illnesses. By being able to recognize the various challenges in the management of Type 1 or 2 diabetes, the American Diabetes Association suggest that each patient needs to receive Diabetes self-management Education the physical, the emotional and social ability of the individual to work and relate (Wooley & Kinner, 2016). People that are found with diabetes are supposed to receive diabetes self-management education from the time they are diagnosed with type 2 diabetes; they are also supposed to be provided with an ongoing self-management support as is required. Zhang & Chu, (2018) argues that Diabetes selfmanagement Education goal is to ensure an increase in the individual's self-efficacy when it comes to physical activity, self-efficacy to managing personal diet, management of stress, glucose monitoring among other necessary behavior and skills for the successful outcomes of diabetes. According to Zhang & Chu (2018), Meta-analyses has proven the impact of Diabetes self-management Education regarding glycaemic control and quality of life. According to an analysis by Zhang & Chu, (2018) Diabetes, self-management Education participants demonstrated a reduction of HbA1c with an initial follow up, and reduction on attenuation to up to 0.24% at the follow-up points 4 or more months after the initial intervention (Cunningham et al., 2018). In this regard, the authors suggest three types of intervention measuring the quality of life; two of this also showed the improvements in the quality of life concerning Diabetes Self-management Education participants.

Mardanian Dehkordi & Abdoli, (2017), also found that the content of Diabetes Self-Management Education is an essential part of the care that calls for the delivery of appropriate education material to individuals. According to the study, beginner living with diabetes were satisfied with the content to provide in Diabetes Self-Management Education. However, when presenting

the initial and general information regarding the management of diabetes, it was essential for those individuals that were diagnosed with diabetes. However, other participants from the study required more personalized information in meeting the daily struggles of living with the condition (Mardanian Dehkordi & Abdoli, 2017). This indicates that the content of the Diabetes Self-Management Education also matters if it is to be regarded as sufficient. The researcher continues to prove that to these individuals that have lived with diabetes for more than a decade; the content was repetitive and too general. From the study, it was found that most participants complained that Diabetes Self-Management Education classes were mostly held without consideration of individual needs. In this regard, the participants felt that individual needs need to be considered among other issues like social, economic, and cultural differences.

In most cases, the patient would attend the classes as a mandatory requirement in receiving healthcare services from the diabetes center, and target endocrinology, however, did not consider their needs to have been counted for regarding the said classes (Mardanian Dehkordi & Abdoli, 2017). In this regard, specific information was asked for all participants when it comes to addressing their challenges. Also (Watson et al., 2018) found that the use of technology such as telemedicine is a growth trend in Diabetes Self-Management Education, by ignoring the use of technology is also another aspect of improving the quality of life and management of diabetes. Individuals living with diabetes stated that with the growing discoveries in technology, it is essential to ensure the use of audiovisuals and Management information systems technologies that help in the improvement of diabetes self-management education for different situation. This is especially true for people that are far from the available hospital facilities as it was discovered by while investigating the importance of telehealth education among Americans in the military

zones. The practice was found to be very useful and brought about positive results (Watson et al., 2018).

Weaver, Lemonde, Payman, & Goodman, (2014) explored the social, economic and cultural issues that shape up the capability of people living with diabetes to continue living a healthy lifestyle through healthy practices. The researcher discovered that the ability to watch one's healthy diet and general lifestyle habits could help improve the primary care of people living with diabetes (Weaver, Lemonde, Payman, & Goodman, 2014). The researcher investigated how social relationships, economic resources, economic circumstance, and dietary management was critical during diabetes self-management education. The research found that the differences in these structures weakened the capability of health and management of special diet.

Gaps

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Concerning the various study in these reviews, multiple gaps were identified. (Weaver, Lemonde, Payman, & Goodman, 2014) Found that there is still a lot to be done when it comes to the implementation of the individualized approach to diabetes self-management education. In most case, the practice given is related to all patients and does not like at the unique individual needs. Also, even with the advent in the implementation of diabetes self-management education, other factors like the social, economic, and cultural issues affect the way that different patients are going to receive the application. In most cases, the studies found that even with the program is well implemented; it was evident that social, cultural, economic and ethnic practices will affect the lifestyle of these patients making it difficult for the application of diabetes self-management education to succeed (Wooley & Kinner, 2016). Also, the program is often implemented generally

and ignores issues such as the years lived with diabetes, the stigma associated with newly diagnosed patients, and reliability of technology-assisted training. As was found by one study, technological issues have always come in when it comes to telehealth diabetes education, which in the end affects the whole management system (Watson et al., 2018). The studies also need to look at the issues around medical insurance, adherence to the self-management practices among other areas as this will, in the end, affect the whole process.

Section Six: Conclusion

In conclusion, diabetes self-management education is essential when it comes to the improvement of the patient quality of life and health. However, it is necessary to ensure that the kind of education provided is effectual calling for individualized personal education, needs assessment, effective methods of teaching and use of modern technologies such as telemedicine and virtual teaching. It is essential to ensure a multi-disciplinary approach which can be used in the diabetes education and can, without doubt, ensure that there is proper delivery of diabetes management information by experts in different fields, in the end, this will maximize the learning process of each. It is also essential to ensure that there is proper consideration of various demographic characters and learning and educations styles for the type of diabetes.

In this regard, it is essential that healthcare providers learn to consider the way that they approach the Diabetes Self-management education. This is the only way that they will be able to meet the needs of people living with diabetes as it is classified under a chronic illness. It has become evident that the traditional methods of diabetes management education and ignorance of technology provides a lot of insufficiencies when it comes to patient education for patients of the

21st century. Also, it is essential to consider the physical environment as it assures the right attention is given to the improvement of diabetes education. The above literature also provided a significant difference when it comes to Type 1 and types two prevalence of diabetes regarding race. Is essential that diabetes self-management education consider this, as it is part of treatment and management for this group, which forms the second largest number of diagnosed type 2 individuals. However, the above review has indicated that diabetes self-management education is not only about providing training to individuals diagnosed with both type 1 and type 2 diabetes.

Recommendation

This review recommends that healthcare institution ensure there is enough social, cultural, and economic resource required to provide the management of special diets concerning those patients that are found in the low resource group. Also, it is essential to look at the social influences which significantly affect the patient's diet intake, especially for the middle class and low-class group. It is also evident that diabetes self-management education is most adhered to by high-class individuals as they are usually motivated when it comes to the maintenance of the diet. Also, most of them have all the social and cultural resources required for the management of diabetes in addition to the use of new technologies such as telehealthcare which it comes to the management of lifestyles.

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Appendix: Section 4:

	Author's Name	Year of Stud y	Study Design	Study Findings	Intervention Type	Other
1	Powers, M. A.,	2013	Qualitative	Glucose	Provision of	
	Davidson, J., &		Literature	pattern	ongoing	Continued
	Bergenstal, R.		review	Managemen	education with	focus on
	M.			t is useful in	a primary	Glucose
				increasing	focus on the	Pattern

				confidence in the patient's diabetes self- managemen t. Most patients gain confide in understandi ng the way that their glucose data is compared to the knowing if, or target goals and when they are required to make any their choice of food. Also, regarding their physical	Glucose pattern management, behaviors and problem solving, which positively influences the levels of glucose and meet the challenges.	Managemen t to ensure patient confidence in diabetes self-care.
2 .	Dehkordi, M. L., & Abdoli, S.	2017	Quantitative using a descriptive phenomenologi cal approach	activity; From the results, it was found that the current Diabetes Self-Managemen t Educational approach practices do not meet the needs and expectations of the PWD attending	Conduct needs assessment, multidisciplina ry approach, interactive teaching methods, and application of technology in improving Diabetes selfmanagement education.	Ensure the use of appropriate physical space as a way of improving Diabetes Self-Managemen t Education

				different programs.		
3 .	Weaver, R. R., Lemonde, M., Payman, N., & Goodman, W. M.	2014	Qualitative method	The social, economic, and cultural resources were responsible for underminin g the managemen t of patient's diet among the low-income groups. Also, social influences profoundly influence the adherence to diet for many people in the medium group.	To understand the patient's social, economic, and cultural influences to construct ways to ensure health capability, health, and chronic disease selfmanagement.	None
4	Watson, N., Acuna, D. G., Wardian, J. L., Cobb, E. C., Beavers, D., & Sauerwein, T. J.	2018	Quantitative	Diabetes Self- managemen t Education was broadcast to Radolf Airforce Base, and the patient reported a lot of satisfaction in telehealth. There high satisfaction	Install working Telehealth technology and training patients on ways to use the technology in receiving information about DSME	Meeting the Technology demand issues

				among		
				facilitators		
				as well with		
				DSME via		
				MIST and		
				facilitators		
				were ready		
				to conduct		
				more		
				classes.		
5	Cummingham,	2018	Quantitative	The Meta-	Due to the	More
	A.T.,		Randomized	Analysis	high levels of	studies
	Crittendon, D.		control trials	results	heterogeneity	should be
	R., White, N.,			indicated	in the HbA1c	done to
	Mills, G.D.,			that there	finding, in	understand
	LaNoue, M.D.			was a non-	respect to the	the Diabetes
	,			significant	present	Self-
				effect on the	evidence by	Managemen
				Diabetes	wide CIs and	t Education
				Self-	1 ² values, it	intervention
				Managemen	indicated the	characteristi
				t education	need for a	cs and
				on HbA1c	more	whether this
				in Africa-	rigorously	can be used
				Americans.	designed	in
				QOL also	DSME trials	improving
				did not	regarding	any form of
				show any	African	consistency
				improvemen	Americans.	in
				t and was	Americans.	improving
						the HbA1c
				very		in this
				important		population.
				regarding Diabetes		population.
				Self-		
				Managemen		
				t Education		
				and an		
				outcome to		
				measure		
				future trials.		