CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
http://doi.org/10.5281/zenodo.3830123

Available online at: http://www.iajps.com Research Article

INCREASING THE EFFECTIVENESS OF DIABETES TYPE 2 USING TREATMENT ALGORITHMS PRIMARILY IN THE HISPANIC POPULATION

[1]Dr. Ammar Farooq, [2]Dr. Saba Shahid, [3]Dr Muhammad Junaid

[1]Govt Dispensery Factory Area Faisalabad, [2]Sir Ganga Ram Hospital, Lahor, [3]Mardan Medical Complex/MTI, Mardan.

Article Received: March 2020 **Accepted:** April 2020 **Published:** May 2020

Abstract:

The diabetes type 2 is more frequently present in Hispanic habitants of US as compared to non-Hispanic. There are many reasons because of which diabetes type 2 is more prevalent. These include natural features, economic situations and educational characteristics. There is one essential cause of diabetes in Hispanic sufferers which is heredity. But these features related to heredity can never be improved. Other causes of its prevalence are social and economic aspects like less entrée to health clinics, fences of talking, artistic viewpoints and less capability related to health care giver etc. These factors should be made better to improve the treatment of diabetes type 2. At the clinical level, strategies should be made to lessen the differences among Hispanic and non-Hispanic sufferers. At physician and sufferers' level, traditional viewpoints should be considered during the selection of suitable management strategy. By diagnosis of favored language and level of achievement for every sufferer overall organization of diabetes type 2 should be separated. These preferences need to develop the announcement by traditionally suitable learning resources and plans. Hurdles in the way of management of diabetes type 2 in Hispanic sufferers these plans may prove useful.

Keywords: *Cultural competence; Hispanic Latino; Treatment barrier; Type 2 diabetes mellitus.*

Corresponding author:

Dr. Ammar Farooq,

Govt Dispensery Factory Area, Faisalabad.

QR code

Please cite this article in press Ammar Farooq et al, ***Increasing The Effectiveness Of Diabetes Type 2 Using Treatment Algorithms Primarily In The Hispanic Population.,*** *Indo Am. J. P. Sci, 2020; 07(05).*

INTRODUCTION:

Type 2 diabetes mellitus is more frequent in Hispanic sufferers of US. There are many factors that are responsible for the spread of diabetes type 2. These include the natural features, social and economic situations and traditional aspects. Natural features include hereditary disposition causes the enhanced opposition towards insulin1-2. It is not well known why it is more frequent in Hispanic patients as compared to non-Hispanic. Opposition towards insulin causes fatness in Hispanic patients. When these patients were observed they were seen with more amount of fat in visceral organs3-4. It has been said by the researchers that diabetes type 2 in Hispanic patients is caused by the disposition of beta cells inactivity and insulin confrontation. These abnormalities were seen in ancestrally inclined persons in examination of families along with some medical experiments5. It has been obvious the role of heredity and biology in the spread of diabetes type 2. Unluckily, there are no chances to develop these genetic chances of factors6. Oppositely, situations of social and economic of the Hispanic culture7. It gives the physicians and sufferers chances to lessen the progressing and developing the management of type 2 diabetes.

REVIEW OF LITERATURE:

It is required to analyze about the most useful therapy which will improve the diabetes type 2 in Hispanic sufferers. By observing the various observation we found many irregular, organized medical experiments which offers various lipid lessening and anti hyper managements which are quite helpful. Most of the data obtained about Hispanic patients is the result of the previous studies.

It has been noticed by the help of a retrospective observation made on Americans, they give the same results as the non-Hispanic individuals in US. These were treated with pioglitazone. There fatness and lipids gathering is also similar. Another random study was organized. It analyzes the effectiveness of exenatide. It was given to the patients two times in a day prior to breakfast and night meal. These consequences are more essential for Hispanic patients because they eat a small amount of food during breakfast. Effectiveness of rosuvastatin in comparison with atorvastatin was identified by the help of a study Assessing Rosuvastatin in Hispanic Population. According to this study lowering of lipoprotein cholesterol level was same in Hispanic and Non-Hispanic individuals. Antihypertensive and Lipid Lowering Treatment to Prevent Heart Attack Trial describes the 20% lower risks of gaining management of blood pressure in Hispanic patients as compared to non-Hispanic patients.

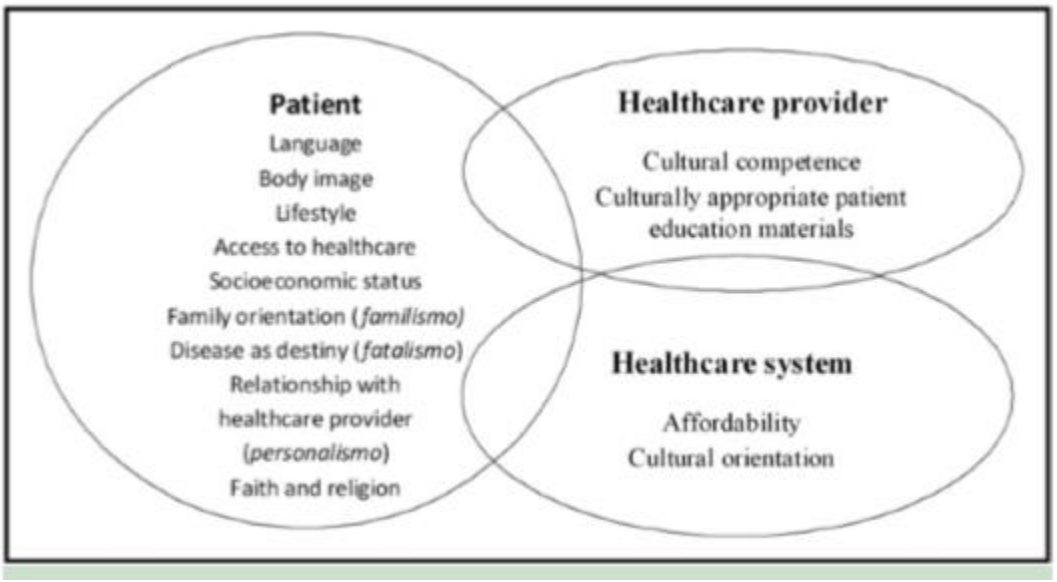
Another study International Verapamil SR-Trandolapril Study found that there are less chances of heart attack, brain ham rage or mortality in Hispanic patients because they can easily manage their level of blood pressure as compare to non-Hispanic patients. So it can be concluded that there is more defense mechanism present in Hispanic patients against diabetes as compared to non Hispanic. So it is necessary for physicians to have a well know how about the requirements of Hispanic sufferers to better admittance and obedience to these managements in order to progress the consequences in these habitants.

MATERIALS AND METHODS:

Barriers to the management of type 2 diabetes among Hispanic sufferers:

There are many hurdles for the management of type 2 diabetes in Hispanic patients. These barriers are present for patients, for physicians, for medical centers and for the families of the patients. (Figure 1) Assessment of hurdles cannot be summarized in this article. Hurdles for the sufferers and physicians are described below.

Figure 1: Potential hurdles to the management of Hispanic sufferers



Social and economic hurdles:

Many patients of diabetes lived in the social and economic situation which is lower. The monthly proceeds of the Hispanic and non-Hispanic individuals were compared in US in 2004. This task was performed by US Census Bureau. In 2007 scarcity level was examined between Hispanic and non Hispanic patients. In Hispanic sufferers 22% families of the patients were inferior to scarcity level while in non Hispanic 9% were seen below scarcity level. Lower economical and social status causes the more spread of type 2 diabetes. Patients belonging to low class family are not able to cure themselves properly because of the expenditures of the hospitals. In 23.8% Hispanic and 8.3% non Hispanic sufferer's expenditures are the biggest hurdle for the treatment of the diabetes.

Hispanic sufferers are less accessible towards vehicles, causing to issues attendance clinical engagements or educational strategies. Inhabitance in lower class area can obstruct self controlled by less access to meal supposed to be more essential for the sufferer for their survival. It also restricts chances to engage in exercise.

Access to hospitals and clinics:

Areas suffering from poverty have less access towards the hospitals and clinics, few instructive centers are beleaguered at racial minorities. This causes many issues, like less access to hospitals, less rates of suggested checking analysis and unidentified which eventually cause the bad condition of health.

Language hurdles:

Another important hurdle for the Hispanic patients is the language. Most of the patients do not know how to speak English. So they cannot transfer their issues to the physicians of higher clinics. They usually talk in Spanish but Spanish is less understood by the doctors. This hurdle of language limits the association and connection between patients and physicians. In 2000 US National Health Interview Survey, English talented Hispanic sufferers with chronic disorder were essentially more probable to account gaining suggestion from their doctors about exercise and proper diet in comparison with those who don't know to speak English. Assessment of National Health and Nutrition Examination Survey information from 1999-2004 indicated that Hispanic sufferers who cannot speak English have greater complexities of diabetes type 2 and more pressurized as compare to those who know English speaking.

Glycemic management was similar in Hispanic and non Hispanic sufferers. Persons having fewer achievements were essentially lower rates of health indemnity and entrée to clinics. It has been observed that the patient who do not know to speak English don't know the risks and complexities of their disease. They were not underwent proper management and identifications steps.

Cultural hurdles:

Culture of Hispanics is full of civilizations, viewpoints, performances and manners. All these characters manipulate the discernment and accepting of the methodologies and management of the disease. Less information about the disorder or less compassion about these problems can generate

hurdles to the accomplishment of better excellence of management. There is more awareness of drugs to Hispanics as compared to non Hispanics.

Misapprehension about the type 2 diabetes is more frequent in Hispanic sufferers. Less know how about the disease is another big hurdle in the treatment of the type 2 diabetes. There is usually a uncertain amount of literary capability by the physicians, as well as less rationally suitable sufferer's instructive resources. Deprived traditional capability can cause the less happiness of sufferer, which may cause the patient to not listen prospect activities or search for additional heed. When dealing with chronic diabetic patients culture hindrance is a significant deliberation.

RESULTS AND DISCUSSION:

Defeating social and economic hurdles:

There is no assurance of life and health between Hispanic sufferers. So there exists a wide constant breach in the excellence of fitness between these cultural groups. Clinical exposure is present for the sufferer of 65 years of age. So there is a similarity between the Hispanic and non Hispanic patients who are greater than 65 years of age having health assurance. So, methodologies like creating clinical treatment present to lower and progressing convenience of confidential health assurance by lessening expenditures and diminishing the pre morbid situation needed may be suitable.

Progress in entrée to hospitals and clinics:

Health case entrée can be improved by medical and educational plans based on the population of the sufferer's or their houses when suitable. For the elimination of the transportation, this would be helpful in enabling the individuals of family to convoy sufferers and give them help. Methodologies were made to better the issue of transportation for the individuals who don't have the access to transport system to go to hospital and treat themselves properly according to the date given by the physicians.

Overcoming the hindrance of language:

Hispanic sufferers don't want to speak English. They convey their message frequently in Spanish language. So if the physician doesn't know about the Spanish language so there should be translators who convey the message of patients to the physician and the cautions and consequences of the treatment b the physician properly to the sufferer8. These practices enhance the comprehension and connection between physician and patient9. This would result in improved medical findings and greater contentment of sufferer. For this purpose skilled translator should be hired.

Improvement in the information of the patients:

More information in sufferers causes the better self handling and behavior of the patient. In this way disease can be managed and treated properly10. It has been observed from various experiments that health education strategies are found to be useful for the achievement of the better results in Hispanic patients11. It is necessary that the educational plans should be traditionally suitable, address traditional hindrances etc. From the observations of 5 studies it has been concluded that the strategies of Spanish led to essential betterment in many medical endpoints when analyzed with standard care12.

In educating sufferers it is needed to teach them traditionally suitable, less literacy and two language teaching13-14. Sufferers of type diabetes should educate to transform their awareness of outer management of disorder to one of interior management and empowerment15.

CONCLUSION:

The major causes of failure of treatment in Hispanic patients is less social and economic condition, less achievement to clinics and hospitals, ethical issues, traditional hindrances and less comparison of traditions. Many procedures were applied to reduce these factors. Patient should undergo therapies to treat themselves. Hurdles of language can be eliminated by the use of translator between patient and physician. In this way patient could easily understand the methodology of cure. Physicians should consider the culture and traditions o every patient and respect them. Information and self control of the patient can be enhanced by giving traditionally suitable education. Family and relatives should ask to attend all the lectures given by the physicians who are designed for the improvement and guidance of the patients. At last, strategies should be made to lessen the differences between Hispanic and non-Hispanic patients.

REFERENCES:

1. Parker, Melissa M., Alicia Fernández, Howard H. Moffet, Richard W. Grant, Antonia Torreblanca, and Andrew J. Karter. "Association of patient-physician language concordance and glycemic control for limited–English proficiency Latinos with type 2 diabetes." *JAMA internal medicine* 177, no. 3 (2017): 380-387.
2. Schellinger, Megan M., Mary Pell Abernathy, Barbara Amerman, Carissa May, Leslie A. Foxlow, Amy L. Carter, Kelli Barbour et al. "Improved outcomes for hispanic women with gestational diabetes using the Centering

Pregnancy© Group Prenatal Care Model." *Maternal and child health journal* 21, no. 2 (2017): 297-305.

3. Frias, Juan, Naunihal Virdi, Praveen Raja, Yoona Kim, George Savage, and Lars Osterberg. "Effectiveness of digital medicines to improve clinical outcomes in patients with uncontrolled hypertension and type 2 diabetes: prospective, open-label, cluster-randomized pilot clinical trial." *Journal of medical Internet research* 19, no. 7 (2017): e246.
4. Avilés-Santa, M. Larissa, John Heintzman, Nangel M. Lindberg, Rafael Guerrero-Preston, Kenneth Ramos, Ana L. Abraído-Lanza, Jonca Bull et al. "Personalized medicine and Hispanic health: improving health outcomes and reducing health disparities–a National Heart, Lung, and Blood Institute workshop report." In *BMC proceedings*, vol. 11, no. 11, p. 11. BioMed Central, 2017.
5. Seol, Haesun, Mark Thompson, Kathryn Evans Kreider, and Allison Vorderstrasse. "Diabetes self-management quality improvement initiative for medically underserved patients." *Journal of nursing care quality* 32, no. 3 (2017): 272-279.
6. Fernández, Alicia, Judy Quan, Howard Moffet, Melissa M. Parker, Dean Schillinger, and Andrew J. Karter. "Adherence to newly prescribed diabetes medications among insured Latino and white patients with diabetes." *JAMA internal medicine* 177, no. 3 (2017): 371-379.
7. Hum, Justine, Janice H. Jou, Pamela K. Green, Kristin Berry, James Lundblad, Barbara D. Hettinger, Michael Chang, and George N. Ioannou. "Improvement in glycemic control of type 2 diabetes after successful treatment of hepatitis C virus." *Diabetes care* 40, no. 9 (2017): 1173-1180.
8. Hay, Joel W., Pey-Jiuan Lee, Haomiao Jin, Jeffrey J. Guterman, Sandra Gross-Schulman, Kathleen Ell, and Shinyi Wu. "Cost-effectiveness of a technology-facilitated depression care management adoption model in safety-net primary care patients with type 2 diabetes." *Value in Health* 21, no. 5 (2018): 561-568.
9. Carrasquillo, Olveen, Cynthia Lebron, Yisel Alonzo, Hua Li, Aileen Chang, and Sonjia Kenya. "Effect of a community health worker intervention among Latinos with poorly controlled type 2 diabetes: the Miami Healthy Heart Initiative randomized clinical trial." *JAMA internal medicine* 177, no. 7 (2017): 948-954.
10. Fortmann, Addie L., Linda C. Gallo, Maria Isabel Garcia, Mariam Taleb, Johanna A. Euyoque, Taylor Clark, Jessica Skidmore et al. "Dulce Digital: an mHealth SMS-based intervention improves glycemic control in Hispanics with type 2 diabetes." *Diabetes Care* 40, no. 10 (2017): 1349-1355.
11. Rashid, Jamila R., Brenda A. Leath, Benedict I. Truman, Donna Durant Atkinson, Lisa C. Gary, and Nanmathi Manian. "Translating comparative effectiveness research into practice: Effects of interventions on lifestyle, medication adherence, and self-care for type 2 diabetes, hypertension, and obesity among black, Hispanic, and Asian residents of Chicago and Houston, 2010 to 2013." *Journal of Public Health Management and Practice* 23, no. 5 (2017): 468-476.
12. Yeh, Alicia, Bijal Shah-Manek, and Kajua B. Lor. "Medication regimen complexity and A1C goal attainment in underserved adults with type 2 diabetes: a cross-sectional study." *Annals of Pharmacotherapy* 51, no. 2 (2017): 111-117.
13. Pérez, A., A. Ramos, P. Reales, N. Tobares, R. Gómez-Huelgas, and Grupo de estudio AL ALTA. "Indicator performance after the implementation of the Spanish Consensus Document for the control of hyperglycemia in the hospital and at discharge." *Revista Clínica Española (English Edition)* 219, no. 1 (2019): 18-25.
14. Reach, G., V. Pechtner, R. Gentilella, A. Corcos, and A. Ceriello. "Clinical inertia and its impact on treatment intensification in people with type 2 diabetes mellitus." *Diabetes & metabolism* 43, no. 6 (2017): 501-511.
15. Kashaf, Michael Saheb, Elizabeth Tyner McGill, and Zackary Dov Berger. "Shared decision-making and outcomes in type 2 diabetes: A systematic review and meta-analysis." *Patient education and counseling* 100, no. 12 (2017): 2159-2171.