



CODEN [USA]: IAJPBB

ISSN : 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**

SJIF Impact Factor: 7.187

<http://doi.org/10.5281/zenodo.4314989>Available online at: <http://www.iajps.com>

Research Article

**A RESEARCH STUDY ON THE ESTIMATED PERCENTAGE  
OF DIABETES IN WHOLE WORLD INCLUDING PAKISTAN  
ITS EFFECTS AND OVERVIEWS ON PUBLIC HEALTH****<sup>1</sup>Muhammad Umair Jabir, <sup>2</sup>Muhammad Saadatullah, <sup>2</sup>Dr Muhammad Fahad Hameed  
Mirza****<sup>1</sup>Rural Health Center Kalaswala, Sialkot, <sup>2</sup>RHC Lasser Kalan Narowal****Article Received:** October 2020**Accepted:** November 2020**Published:** December 2020**Abstract:**

*Here make this study to check out the overall effect of diabetes on patients in all over the world and review of doctors about this disease and its treatment. We study about new diabetic patients who visited to the doctors and get positive results about this disease. We visited to those patients who were getting treatment for about 4-5 years. In hospital before and during treatment, they know about their family history, body weight, body size, diet, daily routine and medicines, which they were taking before. They also check their blood level, after collecting all these information they start their proper official treatment. Study held in Mayo hospital Lahore, where we divide them into four groups and check out the results. These groups were related to different information, which helps them to treat diabetes in better way. Approximate ages of patients were teenage. Here we see different results as about 40% was those who was not having any family background related to this disease and about 60% was those who was infected with diabetes genetically. They were familiar with this disease. During this study, we see reason of diabetes mostly over eating and less exercise, which make them ill. On the other hand, 33% was taking insulin to cure them and get rid of this disease but 77% was taking proper medication to treat their disease and get a healthy life ahead. So we concluded that about 1/3 of Pakistani population is infected with this disease named as double diabetes.*

**Keywords:** Mean value, biological results, Diabetes, chronic disease.**Corresponding author:****Muhammad Umair Jabir**

Rural Health Center Kalaswala, Sialkot.

QR code



*Please cite this article in press Muhammad Umair Jabir et al, A Research Study On The Estimated Percentage Of Diabetes In Whole World Including Pakistan Its Effects And Overviews On Public Health., Indo Am. J. P. Sci, 2020; 07(12).*

**INTRODUCTION:**

We study out that about 1/3 of Pakistani population is infected with Diabetes, which have different types [1]. Mostly people are affected with type 1 and type 2 diabetes. Here we make study until discuss the Double diabetes, which is a type of diabetes. After whole research and proper information, patients will be aware with their disease and their treatment will be more accurately [2]. It is a deadly disease, which takes thousands of lives every year. This is a most spreader disease of the century which take millions of lives in whole world [3]. It is moving towards an alarming situation now. Treatment and awareness on proper time is necessary to save lives of infected people [4]. This disease if not properly treated and cured, it will increase in next coming years [5]. Exercise is necessary in this disease because during study we have seen that mostly children whose diabetic test was positive was more healthy

and over weighted. They eat more food and just take rest, due to no exercise in their life on daily bases is damaging their lives and increasing risk of diabetes [6]. Actually this disease these cells who make body insulin which reduces the chance of this disease [7]. But when insulin cell decrease in a body due to different reasons, this disease occur and start damaging body and human health we fastly. When this level of insulin who produce in body by its self-decreases then diabetes occur and we visit to the doctor where he diagnose this disease and start treatment [8]. Patients where affected with this disease looks more weak and thin as compared to other healthy persons. But in other type of diabetes, people looks overweighted and eats more food and do less exercise [9]. About 26% children are over weighted and eat more food. Here we check out different causes of diabetes in our country and need a proper treatment [10].

**Table 1 Characteristics of study of population**

Patients characteristics	Yes % (n)	No % (n)
Family history of diabetes	57 (178)	43 (134)
Patients with overweight or obese	64 (199)	36 (113)
Diabetic ketoacidosis at presentation	39 (122)	61 (190)
Autoantibodies positivity	52 (162)	48 (150)
Acanthosis nigricans	34 (106)	66 (206)
Family history of auto-immune disease	23 (72)	77 (240)
History of auto-immune disease	18 (56)	82 (256)

**METHODOLOGY:**

We make this study where we diagnose 313 young ones, which infected with diabetes and got admission in Mayo hospital Lahore for last 3-4 years and getting treatment to diagnose their disease. In Mayo hospital that is located in Lahore, we find some results that yearly number of patient get admitted here who feels symptoms of diabetes and doctors conduct different tests to diagnose their disease and start treatment. We make proper research on their family background, history of their disease and from where and how they got infected with this disease. We take different tests which include check of hemoglobin and different body test to get full knowledge about their disease and do proper treatment to treat their disease more fastly and accurately. Collection of whole data after tests done and make results. We also check the resemblance of height with their weighted, either they are less weighted or eat more food and over

weighted. By using different formulas we calculate the accurate values and then give results about their present conditions. Different tests get performed in laboratory to get excellent and 100% results where no more confusion gets seemed. In any case if we did not get accurate results. We use different methods to collect data and get results.

**RESULTS:**

We take tests and divide patients into different four groups. We see that about 40% patients was having family history and about 60% was having different issue of having this disease as over weight is the main cause. People did not do any exercise on daily bases and do not take care of their selves. Different studies held in Mayo hospital where we do different practical to check out and to diagnose their disease. We measure their different experiments and in different categories to measure correct value of

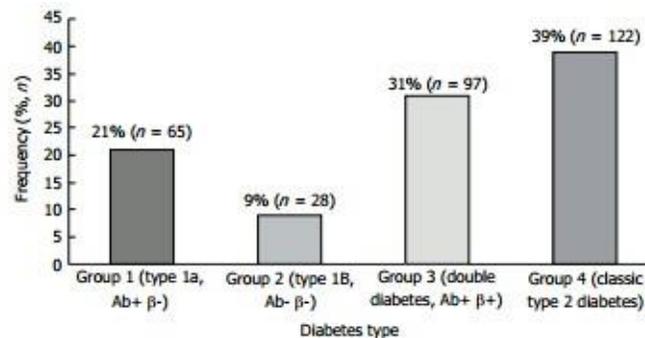
results. We also show results in table 2 some patients need insulin to treat their disease and get healthy life

and some just use medication or pills to treat disease and get good healthy life.

**Table 2 Show characteristics of patients which base on the presence and absence of auto-antibodies and peptide secretion**

Auto-antibodies	Ab+		Ab-	
	$\beta^-$ (G1)	$\beta^+$ (double diabetes)	$\beta^-$ (G2)	$\beta^+$
C-peptide secretion	13.16*	15.3	16.6	17.02*
Age of diagnosis	24 (13.5%)	45 (25.3%)	14 (7.9%)	95 (53.4%)*
Family history of diabetes	32 (44.4%)*	28 (38.8%)	5 (6.9%)	7 (9.7%)*
Family history of auto immune disease	29 (51.7%)*	17 (30.4%)	2 (3.6%)	8 (14.3%)*
History of auto immune disease	57 (46.7%)*	33 (27%)	5 (4%)	27 (22.1%)*
DKA at presentation	21*	26.8	24.2	29.6*
BMI (kg/m <sup>2</sup> )	10.2*	8.9	10.8	11.7*
Patients requiring insulin at diagnosis	65 (22.6%)*	90 (31.4%)	28 (9.8%)	104 (36.2%)
Patients requiring insulin multiple dose injection (follow-up)	65 (44.2%)*	31 (21%)	28 (19%)*	23 (15.6%)*
Patients on metformin only during follow-up	0*	48 (38.1%)	0*	78 (61.9%)*
Patients on metformin with insulin during follow-up	4 (6.1%)*	27 (41.5%)	2 (3.1%)*	32 (49.2%)

**Graph 1**



### DISCUSSION:

When ratio of this disease will be increased then it will more tough to find correct calculations and results so we have to keep it there and diagnose a proper treat [11]. In this way we can overcome this issue which is spreading day by day not only in Pakistan but all over the world [12]. We take several tests and diagnose double diabetes in young ones and children too which is very dangerous for our generation [13]. Because if this disease will increase in children their treatment will be more tough and time consuming [14]. Different hospitals and medical clinics are available where we can go and get proper medication. Patients start using insulin to decrease glucose in their body because diabetes mainly means an increase of glucose level in the body [15]. Due to this disease many other issues generate and start damaging our health as kidney issues, heart issues and patients feel different urine issues [16]. About 34% of the population is infected with double diabetes. We do another study which demonstrates that about 26% of people are infected with type 1 diabetes and 40% with type 2 diabetes [17]. This alarmingly increasing ratio of diabetes increases the chances to use insulin to treat diabetes. We use different tests to manipulate the

results that which type of diabetes children have in their lives [18]. But use of insulin in large amounts is not good for patients because as we know that excess of everything is bad, when we will use insulin on a daily basis then we will be unable to control our body glucose level and the body will start resisting insulin and it will cause serious issues which sometimes cause death [19]. In some cases we also see that this disease which comes in children is due to their family history and family background with this disease. If we do not control it now then it will cause bad results and take thousands of lives. We have to take healthy food in our daily diet because fast and junk food is very injurious to our health and causes serious diseases [20].

### CONCLUSION:

We concluded from this study that we use different methods to check for double diabetes by talking tests in our laboratories. Mainly we have seen that this is due to overeating and less exercise; people cannot make their immune system strong and do not exercise. This disease is increasing day by day. With diabetes, we have seen that many other diseases raise up their heads and harm us as cardiac issues, kidney

infections and failure and many other issues occur. However, main thing in treatment that we have to overcome this disease by medication we have to use tablets for diabetes instead of using insulin. Proper intake of food, which does not create diabetes and daily exercise, can save our lives. We concluded that about 1/3 of total population of Pakistan is affected with this disease and losing their lives. When doctor diagnose us any type of diabetes then we have to take care of our self and do daily exercise with proper balanced food and medication in this way we can overcome this issue and save our lives.

#### REFERENCES:

- Narayan, K. V., Gregg, E. W., Fagot-Campagna, A., Engelgau, M. M., & Vinicor, F. (2000). Diabetes—a common, growing, serious, costly, and potentially preventable public health problem. *Diabetes research and clinical practice*, 50, S77-S84.
- Moussavi, S., Chatterji, S., Verdes, E., Tandon, A., Patel, V., & Ustun, B. (2007). Depression, chronic diseases, and decrements in health: results from the World Health Surveys. *The Lancet*, 370(9590), 851-858.
- Zhou, B., Lu, Y., Hajifathalian, K., Bentham, J., Di Cesare, M., Danaei, G., ... & Lo, W. C. (2016). Worldwide trends in diabetes since 1980: a pooled analysis of 751 population-based studies with 4·4 million participants. *The Lancet*, 387(10027), 1513-1530.
- Basit, A., Fawwad, A., Qureshi, H., & Shera, A. S. (2018). Prevalence of diabetes, pre-diabetes and associated risk factors: second National Diabetes Survey of Pakistan (NDSP), 2016–2017. *BMJ open*, 8(8), e020961.
- Danaei, G., Finucane, M. M., Lu, Y., Singh, G. M., Cowan, M. J., Paciorek, C. J., ... & Rao, M. (2011). National, regional, and global trends in fasting plasma glucose and diabetes prevalence since 1980: systematic analysis of health examination surveys and epidemiological studies with 370 country-years and 2·7 million participants. *The lancet*, 378(9785), 31-40.
- Younossi, Z. M., Golabi, P., de Avila, L., Paik, J. M., Srishord, M., Fukui, N., ... & Nader, F. (2019). The global epidemiology of NAFLD and NASH in patients with type 2 diabetes: a systematic review and meta-analysis. *Journal of hepatology*, 71(4), 793-801.
- Jafar, T. H., Chaturvedi, N., & Pappas, G. (2006). Prevalence of overweight and obesity and their association with hypertension and diabetes mellitus in an Indo-Asian population. *Cmaj*, 175(9), 1071-1077.
- Aamir, A. H., Ul-Haq, Z., Mahar, S. A., Qureshi, F. M., Ahmad, I., Jawa, A., ... & Ishtiaq, O. (2019). Diabetes Prevalence Survey of Pakistan (DPS-PAK): prevalence of type 2 diabetes mellitus and prediabetes using HbA1c: a population-based survey from Pakistan. *BMJ open*, 9(2), e025300.
- Veerawamy, S., Vijayam, B., Gupta, V. K., & Kapur, A. (2012). Gestational diabetes: the public health relevance and approach. *Diabetes research and clinical practice*, 97(3), 350-358.
- Misra, A., Singhal, N., & Khurana, L. (2010). Obesity, the metabolic syndrome, and type 2 diabetes in developing countries: role of dietary fats and oils. *Journal of the American College of Nutrition*, 29(sup3), 289S-301S.
- Iqbal Hydrie, M. Z., Shera, A. S., Fawwad, A., Basit, A., & Hussain D Sc, A. (2009). Prevalence of metabolic syndrome in urban Pakistan (Karachi): comparison of newly proposed International Diabetes Federation and modified Adult Treatment Panel III criteria. *Metabolic syndrome and related disorders*, 7(2), 119-124.
- Garduño-Díaz, S. D., & Khokhar, S. (2012). Prevalence, risk factors and complications associated with type 2 diabetes in migrant South Asians. *Diabetes/metabolism research and reviews*, 28(1), 6-24.
- Seal, C. J., & Brownlee, I. A. (2015). Whole-grain foods and chronic disease: evidence from epidemiological and intervention studies. *Proceedings of the Nutrition Society*, 74(3), 313-319.
- Aziz, Z., Absetz, P., Oldroyd, J., Pronk, N. P., & Oldenburg, B. (2015). A systematic review of real-world diabetes prevention programs: learnings from the last 15 years. *Implementation science*, 10(1), 172.
- Bhowmik, B., Binte Munir, S., Ara Hossain, I., Siddiquee, T., Diep, L. M., Mahmood, S., ... & Hussain, A. (2012). Prevalence of type 2 diabetes and impaired glucose regulation with associated cardiometabolic risk factors and depression in an urbanizing rural community in bangladesh: a population-based cross-sectional study. *Diabetes & metabolism journal*, 36(6), 422-432.
- Majeed, A., El-Sayed, A. A., Khoja, T., Alshamsan, R., Millett, C., & Rawaf, S. (2014). Diabetes in the Middle-East and North Africa: an update. *Diabetes research and clinical practice*, 103(2), 218-222.
- Jiwani, A., Marseille, E., Lohse, N., Damm, P., Hod, M., & Kahn, J. G. (2012). Gestational diabetes mellitus: results from a survey of country prevalence and practices. *The Journal of*

- Maternal-Fetal & Neonatal Medicine*, 25(6), 600-610.
18. Perry, H. B., Zulliger, R., & Rogers, M. M. (2014). Community health workers in low-, middle-, and high-income countries: an overview of their history, recent evolution, and current effectiveness. *Annual review of public health*, 35, 399-421.
  19. Saeedi, P., Petersohn, I., Salpea, P., Malanda, B., Karuranga, S., Unwin, N., ... & Shaw, J. E. (2019). Global and regional diabetes prevalence estimates for 2019 and projections for 2030 and 2045: Results from the International Diabetes Federation Diabetes Atlas. *Diabetes research and clinical practice*, 157, 107843.
  20. Lawton, J., Ahmad, N., Hanna, L., Douglas, M., & Hallowell, N. (2006). 'I can't do any serious exercise': barriers to physical activity amongst people of Pakistani and Indian origin with Type 2 diabetes. *Health education research*, 21(1), 43-54.