



< Back to results | < Previous 3 of 33 Next >

 [Download](#)
 [Print](#)
 [E-mail](#)
 [Save to PDF](#)
 [Add to List](#)
[More... >](#)
[Full Text](#)**Nutrition and Food Science** • Open Access • Volume 51, Issue 2, Pages 362 - 374 • 19 Feb 2021

Cited by 0 documents

Inform me when this document
is cited in Scopus:[Set citation alert >](#)**Document type**

Article • Green Open Access

Source type

Journal

ISSN

00346659

DOI

10.1108/NFS-02-2020-0043

Publisher

Emerald Group Holdings Ltd.

Original language

English

[View less](#)

Adhering to lifestyle change recommendations via the trans-theoretical model: a mixed-methods study among type 2 diabetes patients

Nor, Noraishah Mohamed^a ; Sidek, Suriati^b ; Saad, Nurulwahidah^c ;
 Jaafar, Nurul Hazirah^a ; Mohd Shukri, Nor Azwani^a

 [Save all to author list](#)^a Department of Nutrition Sciences, International Islamic University Malaysia, Kuantan, Malaysia^b Department of Psychology, International Islamic University Malaysia, Kuala Lumpur, Malaysia^c Department of Biomedical Sciences, International Islamic University Malaysia, Kuantan, Malaysia

23

Views count

[View all metrics >](#)[Full text options](#) [Export](#) **Abstract****Author keywords**

Sustainable Development Goals 2022

SciVal Topics**Metrics****Funding details****Abstract**

Purpose: This paper aims to identify and explore the factors affecting type 2 diabetes mellitus (T2DM) patients' adherence to lifestyle change recommendations, with the guidance of the trans-theoretical model (stages of change). **Design/methodology/approach:** This study was conducted in two parts. In

Related documents

Visual Impairment and Self-Efficacy in Diabetes Management

Heydarian, N.M. , Brown-Podgorski, B. , Ramirez, J. (2021) *Science of Diabetes Self-Management and Care*

Multiple unhealthy behaviors share equivalent profiles of readiness for change in patients with type 2 diabetes

Salinas Martínez, A.M. , Gómez Campusano, R.I. , Cordero Franco, H.F. (2021) *International Journal of Environmental Research and Public Health*

An ontology-driven personalization framework for designing theory-driven self-management interventions

Abidi, S.S.R. , Abidi, S. (2013) *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*[View all related documents based on references](#)

Find more related documents in Scopus based on:

[Authors >](#) [Keywords >](#)

Part A, 163 randomly selected participants were asked to complete a cross-sectional survey. Data regarding demographics, stages of change and levels of confidence to engage in lifestyle changes were collected. In Part B, in-depth interviews were conducted among 30 individuals, aged between 30 and 65 years, had been diagnosed with T2DM and had seen dietitian at least once. Purposive sampling was used to recruit participants with different sociodemographic characteristics. Findings: Part A showed that most of the participants were in the pre-action group (60%), with a higher mean HbA1c (8.9%) as compared to the action group (40%) which had a mean HbA1c of 6.9%. Part B further revealed the pre-action group and action group identified four key themes concerning lifestyle changes adherence: stumbling block; self-care belief; knowledge implementation; and self-empowerment. Practical implications: Health-care providers should identify patients' stages of change before lifestyle changes implementation. Originality/value: This study highlighted that many factors might influence a T2DM patient's adherence to lifestyle change recommendations. Determining the stages of change and self-confidence of T2DM patients is needed to ascertain long-term adherence. © 2020, Emerald Publishing Limited.

Author keywords

Adherence; Lifestyle ; Mixed-method; Stages of changes; TTM; Type 2 diabetes mellitus

Sustainable Development Goals 2022  	
SciVal Topics 	
Metrics	
Funding details	

References (36)

[View in search results format >](#)

All

[Export](#) [!\[\]\(de95854c7ee024cfadc48187bbb781b2_img.jpg\) Print](#) [!\[\]\(cef08d8c15d8a8acd5e25ab0d65432c3_img.jpg\) E-mail](#) [!\[\]\(c244836fd67166dc60ebf5279a0f8377_img.jpg\) Save to PDF](#) [Create bibliography](#)

- 1 Standards of medical care in diabetes - 2013 ([Open Access](#))

(2013) *Diabetes Care*, 36 (SUPPL.1), pp. S11-S66. Cited 3054 times.
http://care.diabetesjournals.org/content/36/Supplement_1/S11.full.pdf+html
doi: 10.2337/dc13-S011

[View at Publisher](#)

- 2 5. Lifestyle management: Standards of medical care in diabetesd2019

(2019) *Diabetes Care*, 42, pp. S46-S60. Cited 384 times.
http://care.diabetesjournals.org/content/42/Supplement_1/S46.full-text.pdf
doi: 10.2337/dc19-S005

[View at Publisher](#)

- 3 Adu, M.D., Malabu, U.H., Malau-Aduli, A.E.O., Malau-Aduli, B.S.

Enablers and barriers to effective diabetes self-management: A multi-national investigation ([Open Access](#))

(2019) *PLoS ONE*, 14 (6), art. no. e0217771. Cited 67 times.
<https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0217771&type=printable>
doi: 10.1371/journal.pone.0217771

[View at Publisher](#)

- 4 Aladhab, R.A., Alabood, M.H.
Adherence of patients with diabetes to a lifestyle advice and management plan in basra, Southern Iraq
(2019) *International Journal of Diabetes and Metabolism*, pp. 1-6. Cited 4 times.

-
- 5 Al-Busaïdi, Z.Q.
Qualitative research and its uses in health care
(2008) *Sultan Qaboos University Medical Journal*, 8 (1), pp. 11-19. Cited 133 times.
<https://journals.squ.edu.om/index.php/squmj/article/download/1317/1271>

-
- 6 Aljasem, L.I., Peyrot, M., Wissow, L., Rubin, R.R.
The Impact of Barriers and Self-Efficacy on Self-Care Behaviors in Type 2 Diabetes
(2001) *The Diabetes Educator*, 27 (3), pp. 393-404. Cited 197 times.
doi: 10.1177/014572170102700309

[View at Publisher](#)

-
- 7 Amer, F.A.M., Mohamed, M.S., Elbur, A.I., Abdelaziz, S.I., Elrayah, Z.A.B.
Influence of self-efficacy management on adherence to self-care activities and treatment outcome among diabetes mellitus type 2 sudanese patients ([Open Access](#))
(2018) *Pharmacy Practice*, 16 (4). Cited 16 times.
<https://www.pharmacypractice.org/journal/index.php/pp/article/download/1274>
doi: 10.18549/PharmPract.2018.04.1274

[View at Publisher](#)

-
- 8 Beck, J., Greenwood, D.A., Blanton, L., Bollinger, S.T., Butcher, M.K., Condon, J.E., Cypress, M., (...), Wang, J.
2017 national standards for diabetes self-management education and support
(2017) *Diabetes Care*, 40 (10), pp. 1409-1419. Cited 159 times.
<http://care.diabetesjournals.org/content/40/10/1409.full-text.pdf>
doi: 10.2337/dc17-0025

[View at Publisher](#)

-
- 9 Birkinshaw, A., Nel, R., Walsh, C.
Adherence of patients with type 2 diabetes mellitus with the SEMDSA lifestyle guidelines ([Open Access](#))
(2018) *Journal of Endocrinology, Metabolism and Diabetes of South Africa*, 23 (2), pp. 39-45. Cited 2 times.
<https://www.tandfonline.com/doi/abs/10.1080/16089677.2018.1433110#aHR0cHM6Ly93d3cudGFuZGZvbmxpbmUuY29tL2RvaS9wZGYvMTAuMTA4MC8xNjA4OTY3Ny4yMDE4LjE0MzMxMTBAQEAv>
doi: 10.1080/16089677.2018.1433110

[View at Publisher](#)

-
- 10 Braun, V., Clarke, V.
Using thematic analysis in psychology
(2006) *Qualitative Research in Psychology*, 3 (2), pp. 77-101. Cited 66962 times.
doi: 10.1191/1478088706qp063oa

[View at Publisher](#)

- 11 Bunza, J., Alhassan, A.J.
Complications of diabetes mellitus: an insight in to biochemical complications of diabetes mellitus: an insight in to biochemical
(2019) *European Journal of Pharmaceutical and Medical Research*, 6, pp. 114-120.
-

- 12 Creswell, J.W., Fetters, M.D., Ivankova, N.V.
Designing a mixed methods study in primary care ([Open Access](#))
(2004) *Annals of Family Medicine*, 2 (1), pp. 7-12. Cited 430 times.
doi: 10.1370/afm.104

[View at Publisher](#)

- 13 Deng, R.
A review of the hypoglycemic effects of five commonly used herbal food supplements ([Open Access](#))
(2012) *Recent Patents on Food, Nutrition and Agriculture*, 4 (1), pp. 50-60. Cited 42 times.
<https://benthamscience.com/journals/recent-patents-on-food-nutrition-and-agriculture/>
doi: 10.2174/2212798411204010050

[View at Publisher](#)

- 14 The Diabetes Prevention Program (DPP): Description of lifestyle intervention ([Open Access](#))
(2002) *Diabetes Care*, 25 (12), pp. 2165-2171. Cited 1422 times.
doi: 10.2337/diacare.25.12.2165

[View at Publisher](#)

- 15 Ganiyu, A.B., Mabuza, L.H., Malete, N.H., Govender, I., Ogunbanjo, G.A.
Non-adherence to diet and exercise recommendations amongst patients with type 2 diabetes mellitus attending extension II clinic in Botswana ([Open Access](#))
(2013) *African Journal of Primary Health Care and Family Medicine*, 5 (1), art. no. 457. Cited 47 times.
<http://www.phcfm.org/index.php/phcfm/article/viewFile/457/611>
doi: 10.4102/phcfm.v5i1.457

[View at Publisher](#)

- 16 Gillespie, N.D., Lenz, T.L.
Implementation of a tool to modify behavior in a chronic disease management program
(2011) *Advances in Preventive Medicine*, 2011, pp. 1-5. Cited 13 times.
-

- 17 Han, C.Y., Chan, C.G.B., Lim, S.L., Zheng, X., Woon, Z.W., Chan, Y.T., Bhaskaran, K., (...), Chong, M.F.-F.
Diabetes-related nutrition knowledge and dietary adherence in patients with Type 2 diabetes mellitus: A mixed-methods exploratory study ([Open Access](#))
(2020) *Proceedings of Singapore Healthcare*, 29 (2), pp. 81-90. Cited 4 times.
<http://psph.sagepub.com/content/by/year>
doi: 10.1177/2010105820901742

[View at Publisher](#)

- 18 Hill, L.
Managing diabetes: Use of the transtheoretical model
(2008) *Journal of the Arkansas Medical Society*, 43 (1), pp. 6-7. Cited 2 times.
www.arkmed.org/
-

- 19 Holmen, H., Wahl, A., Torbjørnsen, A., Jenum, A.K., Småstuen, M.C., Ribu, L.
Stages of change for physical activity and dietary habits in persons with type 2 diabetes included in a mobile health intervention: The Norwegian study in RENEWING HEALTH
(Open Access)
(2016) *BMJ Open Diabetes Research and Care*, 4 (1), art. no. e000193. Cited 30 times.
<http://drc.bmjjournals.org/content/4/1/e000193.full.pdf+html>
doi: 10.1136/bmjdrc-2016-000193

[View at Publisher](#)

- 20 Johansson, K., Österberg, S.A., Leksell, J., Berglund, M.
Manoeuvring between anxiety and control: Patients' experience of learning to live with diabetes: A lifeworld phenomenological study (Open Access)
(2015) *International Journal of Qualitative Studies on Health and Well-being*, 10, art. no. 27147. Cited 13 times.
<http://www.jqhw.net/index.php/jhw/article/view/27147/39472>
doi: 10.3402/qhw.v10.27147

[View at Publisher](#)

- 21 Kamaruddin, N.A.
(2015) *Clinical practice guideline of type 2 diabetes mellitus ministry of health Malaysia*. Cited 133 times.
-

- 22 Knowler, W.C., Barrett-Connor, E., Fowler, S.E., Hamman, R.F., Lachin, J.M., Walker, E.A., Nathan, D.M.
Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin (Open Access)
(2002) *New England Journal of Medicine*, 346 (6), pp. 393-403. Cited 14313 times.
doi: 10.1056/NEJMoa012512

[View at Publisher](#)

- 23 Mahdavi, R., Halali, F., Asghari Jafarabadi, M., Mobasseri, M.
Contribution of barriers to dietary intake in female patients with type 2 diabetes
(2018) *Nutrition and Food Science*, 48 (3), pp. 510-519. Cited 2 times.
<http://www.emeraldinsight.com/info/journals/nfs/nfs.jsp>
doi: 10.1108/NFS-04-2017-0080

[View at Publisher](#)

- 24 Menti, D., Limbert, C., Lyrakos, G.
Investigating the effectiveness of theory-based interventions for improving treatment adherence of patients with type 2 diabetes mellitus: a systematic review of randomised controlled clinical trials
(2019) *Journal of Health and Social Sciences*, (May). Cited 3 times.
-

- 25 Mishali, M., Omer, H., Heymann, A.D.
The importance of measuring self-efficacy in patients with diabetes ([Open Access](#))
(2011) *Family Practice*, 28 (1), pp. 82-87. Cited 73 times.
<http://fampra.oxfordjournals.org/>
doi: 10.1093/fampra/cmq086
[View at Publisher](#)
-
- 26 Mohamed Nor, N., Mohd Shukri, N.A., Mohd Yassin, N.Q.A., Sidek, S., Azahari, N.
Barriers and enablers to make lifestyle changes among type 2 diabetes patients: A review ([Open Access](#))
(2019) *Sains Malaysiana*, 48 (7), pp. 1491-1502. Cited 4 times.
http://www.ukm.my/jsm/pdf_files/SM-PDF-48-7-2019/18%20Noraishah%20Mohamed%20Nor.pdf
doi: 10.17576/jsm-2019-4807-18
[View at Publisher](#)
-
- 27 (2019) *Managing blood glucose in patients with type 2 diabetes*
National Institute for Health and Care Excellence
[file:///C:/Users/Karen/Downloads/type-2-diabetes-in-adults-managing-blood-glucose-in-adults-with-type-2-diabetes\(1\).pdf](file:///C:/Users/Karen/Downloads/type-2-diabetes-in-adults-managing-blood-glucose-in-adults-with-type-2-diabetes(1).pdf)
-
- 28 Norris, S.L., Zhang, X., Avenell, A., Gregg, E., Bowman, B., Schmid, C.H., Lau, J.
Long-term effectiveness of weight-loss interventions in adults with pre-diabetes: A review
(2005) *American Journal of Preventive Medicine*, 28 (1), pp. 126-139. Cited 117 times.
doi: 10.1016/j.amepre.2004.08.006
[View at Publisher](#)
-
- 29 Powers, M.A., Bardsley, J., Cypress, M., Duker, P., Funnell, M.M., Hess Fischl, A., Maryniuk, M.D., (...), Vivian, E.
Diabetes Self-Management Education and Support in Type 2 Diabetes: A Joint Position Statement of the American Diabetes Association, the American Association of Diabetes Educators, and the Academy of Nutrition and Dietetics
(2015) *Journal of the Academy of Nutrition and Dietetics*, 115 (8), pp. 1323-1334. Cited 98 times.
http://www.elsevier.com/wps/find/journaldescription.cws_home/727057/description#description
doi: 10.1016/j.jand.2015.05.012
[View at Publisher](#)
-
- 30 Prochaska, J.O., DiClemente, C.C., Norcross, J.C.
In search of how people change: Applications to addictive behaviors
(1992) *American Psychologist*, 47 (9), pp. 1102-1114. Cited 6377 times.
www.apa.org/journals/amp.html
doi: 10.1037/0003-066X.47.9.1102
[View at Publisher](#)
-

- 31 Sanghamitra, P.
Type 2 diabetes and physical activity: barriers and enablers to diabetes control in Eastern India
(2019) *Primary Health Care Research and Development*, 20, p. 5. Cited 7 times.

-
- 32 Sarkar, U., Fisher, L., Schillinger, D.
Is self-efficacy associated with diabetes self-management across race/ethnicity and health literacy? ([Open Access](#))

(2006) *Diabetes Care*, 29 (4), pp. 823-829. Cited 384 times.
<http://care.diabetesjournals.org/cgi/reprint/29/4/823>
doi: 10.2337/diacare.29.04.06.dc05-1615

[View at Publisher](#)

-
- 33 Saunders, R., Chia, Y.C., Abdullah, N., Ablah, E.
Goals, beliefs, knowledge, and barriers for diabetes selfcare in a multi-ethnic population in malaysia: A qualitative study

(2019) *Medical Journal of Malaysia*, 74 (6), pp. 483-491. Cited 3 times.
<http://www.e-mjm.org/2019/v74n6/diabetes-self-care.pdf>

-
- 34 Taylor, D.
(2006) *A review of the use of the health belief model (HBM), the theory of reasoned action (TRA), the theory of planned behaviour (TPB) and the Trans-Theoretical model (TTM) to study and predict health related behaviour change*. Cited 90 times.

-
- 35 Tong, A., Sainsbury, P., Craig, J.
Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups ([Open Access](#))

(2007) *International Journal for Quality in Health Care*, 19 (6), pp. 349-357. Cited 12136 times.
doi: 10.1093/intqhc/mzm042

[View at Publisher](#)

-
- 36 Vallis, M., Ruggiero, L., Greene, G., Jones, H., Zinman, B., Rossi, S., Edwards, L., (...), Prochaska, J.O.
Stages of change for healthy eating in diabetes: Relation to demographic, eating-related, health care utilization, and psychosocial factors

(2003) *Diabetes Care*, 26 (5), pp. 1468-1474. Cited 119 times.
doi: 10.2337/diacare.26.5.1468

[View at Publisher](#)

About Scopus

[What is Scopus](#)

[Content coverage](#)

[Scopus blog](#)

[Scopus API](#)

[Privacy matters](#)

Language

[日本語版を表示する](#)

[查看简体中文版本](#)

[查看繁體中文版本](#)

[Просмотр версии на русском языке](#)

Customer Service

[Help](#)

[Tutorials](#)

[Contact us](#)

ELSEVIER

[Terms and conditions](#) ↗ [Privacy policy](#) ↗

Copyright © Elsevier B.V. ↗. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

We use cookies to help provide and enhance our service and tailor content. By continuing, you agree to the use of cookies ↗.

