



A PSAD Group response to the consensus report on the definition and interpretation of remission in type 2 diabetes: a psychosocial perspective is needed

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To the Editor: We note that the ADA/EASD consensus report on the definition of remission of type 2 diabetes is largely limited to a medical interpretation, focussing on physiological considerations and monitoring of biomedical indices [1]. As psychologists and behavioural scientists, we believe this consensus report would have benefitted from inclusion of a section highlighting that remission requires ongoing education, and behavioural and psychosocial support to manage expectations, enhance self-efficacy, minimise the potential for emotional distress or stigma, and to ensure sensitive and appropriate communication.

We recognise that the evidence for remission enables greater choice, self-efficacy and pro-active self-management from the time of diabetes diagnosis [2], with the possibility of a life free

from diabetes-related complications. From a psychological perspective, this is important as it offers hope, which is notably the antithesis of depression [3], the occurrence of which is more common among people with type 2 diabetes than the general population and increases risk for diabetes-related complications [4].

However, several position statements around the world highlight that language matters in diabetes care [5]; so, we need to consider the broader implications of the language of remission beyond the medical interpretation. The consensus report proposes that ‘remission’ describes ‘a sustained metabolic improvement in [type 2 diabetes] to nearly normal levels’ [1]. While definitions of remission vary, all share the central notion of ‘release’. We believe that ‘remission’ is the

Members of the PSAD Study Group are listed in the Appendix.

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correct language if it means that an individual has glycaemic levels in the range determined to mean a release from diabetes, without ongoing need for medication or maintenance of new health behaviours (e.g. diet, activity, sleep or stress management). However, this is not the case here; in the context of type 2 diabetes, achieving and sustaining remission requires multiple and complex long-term changes in health behaviours, thinking patterns and social behaviours [6, 7].

So, let us consider what this may mean to a person with type 2 diabetes; they have been through a period of intensive treatment (a ‘change of lifestyle, other medical or surgical interventions’ [1]) and their doctor declares that their diabetes is now ‘in remission’. Are they now cured? Is their diabetes gone forever? Do they now fear the recurrence of diabetes? Are they more or less distressed? What are the implications for their identity, or for the majority who cannot achieve or sustain remission? Attitudes about identity following cancer remission play a complex role in the individual’s longer-term outcomes [8]; this will be even more relevant in type 2 diabetes, where remission is reliant entirely on the individual’s behaviours.

Remission will not be a reality for most people for most of the time, and certainly not without considerable behavioural changes and psychosocial support [6, 7]. In the absence of evidence regarding the suitability of the term ‘remission’ in the context of type 2 diabetes, we do not propose an alternative term. However, we do encourage full consideration of the behavioural and psychosocial perspective of, and cautious messaging about remission in clinical practice and public health communications, in order to increase self-efficacy without creating false hope, feelings of failure or stigma for those who cannot achieve or sustain remission.

Appendix

Members of the PsychoSocial Aspects of Diabetes (PSAD) Study Group of the European Association for the Study of Diabetes (EASD) at October 2021

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Forde R, Francis SA, Frizelle DJ, Gåfvæls C, Garrett C, Geerling R, Geraets A, Goethals E, Grabowski D, Graham E, Grammes J, Graue M, Groenbaek H, Gross C, Guinzbourg M, Hackett R, Hadjiconstantinou M, Hagger V, Hagman J, Halliday J, Hartman E, Hendrieckx C, Hermanns N, Holloway E, Holmes-Truscott E, Holt RIG, Howland S, Huber JW, Huisman S, Hynes L, Indelicato L, Ismail K, Iversen M, Jean Francois C, Jenkinson E, Joensen LE, Johansen CB, Joiner K, Jones A, Kalesnikava V, Kalra S, Kanc Hanžel K, Karsidag D, Kingod N, Klemenčič S, Kokoszka A, Kovacs Burns K, Kristensen LJ, Kubiak T, Kulzer B, Lake A, Lange K, Lawrence S, Leendertse T, Lindberg-Wad J, Lindekinde N, Lindgreen P, Liu S, Lloyd C, Lowry M, Lukács A, Maas-van Schaijk N, MacLennan K, Maged H, Maindal HT, Marks KP, Mathiesen AS, McInerney A, McKechnie V, McSharry J, Meadows K, Melin E, Møllergård E, Menting J, Messina R (Honorary Secretary), Mezuk B, Mocan A (Executive Committee member), Møller Hansen U, Molvær AK, Morrissey E, Muijs L, Munda A, Muzambi R, Nefs G, Newson L, Nexoe M, Nguyen L, Nouwen A, Nuutinen H, O’Hara MC, Oleson K, Paddison C, Panduro Madsen K, Paquette K, Pate T, Pelicand J, Petrak F, Peyrot M, Pibernik-Okanović M, Pogorelova A, Polonsky WH, Pols-Vijlbrief R, Pouwer F, Povey R, Priesterroth L, Priharjo R, Racaru S, Racca C, Raiff B, Rasmussen B, Raspovic A, Reach G, Reaney M, Regeer H, Reidy C, Reimer A, Robins L, Rondags S, Roos T, Rosengren A, Rothmann M, Saleh Stattin N, Saßmann H, Sattoe J, Scheuer S, Schipp J, Schmitt A, Schram M, Singh H, Skinner TC, Skovlund S, Smith IP, Smith J, Smith K, Snoek FJ, Soholm U, Songini M, Sparud Lundin C, Speight J (Chair), Stenov V, Stewart R, Stuckey H, Sturt J (Vice Chair), Tah P, Tariq A, Thastum M, Trief P, Upsher R, Valdorsdorf Jensen M, Vallis M, van Beem S, van Dam T, Van Der Feltz-Cornelis C, van Dijk S, van Duinkerken E, van Os M, Varela Moreno E, Ventura AD, Verkade H, Vluggen S, Wagner J, Walker E, Wallace T, Walsh D, Wändell P, Whitelock V, Whittle T, Wieringa T, Willaing I, Winkley K, Winterdijk P, Zahn D, Zaremba N, Zhang J, Zoffmann V.

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References

1. Riddle MC, Cefalu WT, Evans PH et al (2021) Consensus report: definition and interpretation of remission in type 2 diabetes. *Diabetologia* 64(11):2359–2366. <https://doi.org/10.1007/s00125-021-05542-z>
2. Taylor R (2020) Type 2 diabetes remission: latest evidence for health care professionals. *Practical Diabetes* 37(5):177–182. <https://doi.org/10.1002/pdi.2297>
3. Leite A, de Medeiros AGAP, Rolim C et al (2019) Hope theory and its relation to depression: a systematic review. *Ann Psychiatr Clin Neurosci* 2(2):1014
4. Pouwer F, Schram MT, Iversen MM et al (2020) How 25 years of psychosocial research has contributed to a better understanding of the links between depression and diabetes. *Diabet Med* 37:383–392. <https://doi.org/10.1111/dme.14227>
5. Speight J, Skinner TC, Dunning T et al (2021) Our language matters: improving communications with and about people with diabetes. A position statement by Diabetes Australia. *Diabetes Res Clin Pract* 173:108655. <https://doi.org/10.1016/j.diabres.2021.108655>
6. Rehackova L, Araujo-Soares B, Steven S et al (2020) Behaviour change during dietary type 2 diabetes remission: a longitudinal qualitative evaluation of an intervention using a very low energy diet. *Diabet Med* 37(6):953–962. <https://doi.org/10.1111/dme.14066>
7. Rehackova L, Rodrigues AM, Thom G et al (2021) Participant experiences in the diabetes REmission clinical trial (DiRECT). *Diabet Med* (in press). <https://doi.org/10.1111/dme.14689>
8. Cheung SY, Delfabbro P (2016) Are you a cancer survivor? A review on cancer identity. *J Cancer Surviv* 10:759–771. <https://doi.org/10.1007/s11764-016-0521-z>

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