

Systematic Review

Motivators and barriers to physical activity: a systematic review of qualitative studies

Ishita Barot¹, Arushi Patel², Muskan Kella¹, Ankur Panchal¹, Arti Muley^{1*}

¹Department of Medicine, PIMSR, Parul University, Wagodia, Vadodara, Gujarat, India

²Department of Medicine, GMERS Medical College, Gotri, Vadodara, Gujarat, India

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*Correspondence:

Dr. Arti Muley,

E-mail: muleyarti40@gmail.com

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ABSTRACT

Physical activity is significant for both mental and physical health. It is lacking in routine lives. This study aimed to identify and synthesise the motivators and barriers to physical activity reported across qualitative studies. This systematic review searched PubMed, Embase, Scopus, and Trip Database up to November 2025 using terms related to physical activity, motivators, and barriers. Studies involving participants aged under 18 years and those with physical limitations precluding activity were excluded. Nine qualitative studies published in English that examined motivators, barriers, or both were included. Study quality was appraised using the critical appraisal skills programme (CASP) checklist. Data on study year, setting, population characteristics, and perceived motivators and barriers were extracted and analysed to identify themes common across studies as well as those specific to age, gender, or geographic location. Perceived physical and psychological benefits (improved fitness, energy, and confidence), social support (from family, peers, and instructors), programme flexibility, structured routines, and environmental facilitators (walkable neighbourhoods, favourable weather) emerged as the principal motivators. Barriers were identified at the individual (fatigue, poor goal-setting, comorbidities), interpersonal (lack of peer support, cultural responsibilities), organisational (workload, unsupportive workplace policies), and environmental (adverse weather, unsafe surroundings, limited facilities) levels. Motivators and barriers to physical activity vary according to personal, social, and environmental circumstances. Effective interventions should therefore address these determinants concurrently-through flexible scheduling, safe exercise environments, workplace accommodations, and community support-to promote physical activity and improve population health.

Keywords: Physical activity, Motivators, Barriers, Qualitative research, Systematic review

INTRODUCTION

Physical activity (PA) is a fundamental determinant of health, conferring benefits that include stress reduction, mood enhancement, improved sleep quality, and enhanced quality of life and longevity. Insufficient physical activity is a major modifiable risk factor for chronic diseases such as diabetes, hypertension, stroke, and cardiovascular disease.¹

The World Health Organization (WHO) recommends 150-300 minutes of moderate-intensity or 75-150 minutes of

vigorous-intensity aerobic activity per week for optimal health.² Despite these recommendations, adherence remains poor: data from the US department of health and human services indicate that only 14.7% of Americans aged 65-74 years and 7.6% of those aged ≥75 years met weekly physical activity targets in 2013.⁴ Globally, insufficient physical activity was similarly prevalent among adolescents aged 11-17 years in 2016, affecting 36% of those in low-income countries and 86% of those in high-income countries, while women were found to be 8% less physically active than men.^{3,5}

Both individual and contextual factors influence physical activity levels.³ Positive influences include perceived health benefits, access to resources, body image, fitness, and social encouragement from family and friends, whereas negative influences include time constraints, adverse weather, and limited resources or amenities.^{3,4} Women, in particular, face additional barriers to achieving optimal activity levels owing to societal pressures, cultural responsibilities, safety concerns, and restricted access to exercise facilities.⁸

A study spanning 142 countries estimated that a modest increase in women's physical activity alone could reduce global physical inactivity by 10% by 2025.⁹ Among middle-aged adults, safety concerns and poor health are frequently cited reasons for inactivity, and individuals with pre-existing health conditions often avoid exercise for fear of exacerbating injury.⁴

A comprehensive understanding of the motivators and barriers to physical activity is therefore essential to inform strategic interventions and foster supportive environments conducive to healthier lifestyles.

METHODS

Search strategy

A systematic literature search was conducted across PubMed, Embase, Scopus, and Trip Database for studies published up to 30 November 2025. The following keywords were used: “physical activity,” “exercise,” “motivator,” and “barrier.” The full PubMed search strategy was: ([“physical activity” OR “exercise” OR “physical exercise” OR “motor activity”] AND [motivat* OR barrier*]).

Inclusion and exclusion criteria

All original qualitative studies examining motivators and/or barriers to physical activity, involving participants without physical or mental limitations, and published in English up to 30 November 2025 were included. Letters to the editor, case reports, case studies, purely interventional studies without a qualitative component, reviews, meta-analyses, and seminar articles were excluded.

The bibliographies of identified articles were additionally screened for relevant studies not captured by the primary search strategy.

Quality assessment

Study quality was appraised using the critical appraisal skills programme (CASP) qualitative checklist, comprising 10 items rated as ‘yes,’ ‘no,’ or ‘can’t tell’.⁷ Two reviewers (AP and IB) independently conducted the quality assessment; a third reviewer (AM or KR) adjudicated any disagreement.

Data extraction

A structured extraction form was used to capture study and participant characteristics (gender, location, country, population, age, instrument type, study design, and year) along with the motivators and barriers reported for physical activity. Study selection was performed independently by two authors (AP and KR), and data extraction was performed by IB and AP. Discrepancies were resolved by a third reviewer (AM or KR) where necessary, and the final synthesis of results was compiled by a fourth author (AM/MK).

RESULTS

Study selection

Database searches identified 2,342 records across PubMed, Embase, and Trip Database. Following title screening, 2,281 irrelevant records were excluded, leaving 61 articles for abstract review; 26 of these were discarded at this stage. Of the remaining 35 articles assessed for full-text eligibility, 9 lacked accessible full text, leaving 26 for full-text review. Seventeen articles were subsequently excluded for not meeting the inclusion criteria, resulting in nine studies included in the final qualitative synthesis (Figure 1).¹⁰⁻¹⁸

Study characteristics

The nine included studies were published between 2010 and 2024 and represented diverse populations, settings, and intervention contexts. Most were secondary qualitative analyses nested within randomised controlled trials; one was a cluster-randomised controlled trial with an embedded qualitative component, and one employed a mixed-methods design (Table 1).^{10,18}

Population and context

Study populations included primary care patients, adults with type 2 diabetes without physical limitations, office workers, inactive older adults, obese adolescents, American Indian elders, and community-dwelling men and women participating in neighbourhood-based lifestyle interventions. Sample sizes ranged from 12 to 842 participants, and intervention durations ranged from 6 weeks to 12 months.^{11,12,14,15,17}

Methodological approaches

Data were collected using semi-structured interviews, telephone interviews, and structured qualitative questionnaires.

Purposive sampling was the most common recruitment strategy, supplemented by convenience, diversity, and volunteer sampling in some studies. Data were analysed using thematic, content, or inferential qualitative approaches.

Outcomes assessed

The included studies explored factors influencing the initiation of and adherence to physical activity, barriers to sustained engagement, perceived benefits (including improved health, confidence, and independence), and broader ecological and social influences.

Methodological quality

All studies clearly specified their aims and employed appropriate qualitative methodology and recruitment strategies. All had obtained prior ethical approval and demonstrated congruence between data collection and interpretation.

Variability was noted primarily in the reporting of reflexivity and researcher influence on data collection and analysis. No studies were excluded on the basis of methodological quality.

Synthesised findings

Aggregation of findings across the nine included studies identified the motivators and barriers to physical activity summarised below and in Table 2.

Motivators

Participants consistently identified physical and psychological benefits, social support, instructor guidance, and structured supervision as key motivators for engagement in and adherence to physical activity, citing companionship, accountability, and shared motivation as factors that enhanced confidence and reassurance regarding exercise safety and effectiveness.

Personal physical and psychological benefits

Improved fitness, physical changes (e.g., weight loss), enhanced mood, increased energy, reduced medication use, and observing the health deterioration of peers¹¹ were reported by 40-50% of participants as significant motivators.

Additional motivators included financial incentives for study participation, self-efficacy, and the ability to track progress and meet personal health and fitness goals.¹⁰⁻¹⁸

Social support

Approximately 30-40% of participants identified social factors-including encouragement from family and friends, social interaction, broader social support, peer recommendations, caregiving responsibilities, group exercise settings, and feedback from class instructors-along with incentives and rewards, as facilitators of physical activity.^{11-13,17,18}

Programme flexibility and environment

Some 30-40% of participants cited transport and accessibility, convenient timing and location, flexible scheduling, structured exercise programmes, proximity to points of interest (including shops), favourable weather, structured routines, and elements of personalisation and competition as motivators for physical activity.^{12,13,15,17,18}

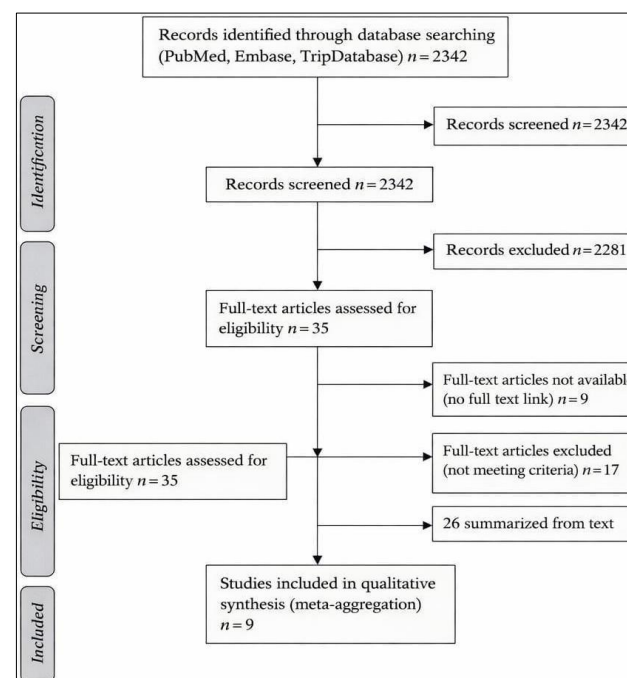


Figure 1: PRISMA flow diagram of study selection.

Other motivators

Physician recommendation and smartphone-based reminders were also reported as facilitators.¹³

Barriers

Barriers to physical activity were multifactorial, operating at individual, interpersonal, organisational, and environmental levels.

Individual barriers

Reported by 20-30% of participants, these included poor goal-setting, limited awareness of the risks of sedentary behaviour, physical limitations, competing responsibilities, fatigue (20%), low energy (29%), lack of interest (15%), pre-existing health conditions, difficulty sustaining routines after programme completion, and lack of time or motivation.^{10,13-15,18}

Interpersonal barriers

Cited by 25-40% of participants, these included lack of sustained motivation or habit formation, discomfort in

shared or open workspaces, absence of peer support, psychological factors, competing life responsibilities, conflict with schoolwork (36% at baseline; 29% at 6 months), low motivation (27%), conflict with school-related social obligations (24%), transport difficulties (38%), lack of companionship (16%), and other commitments.^{10,12,14,15,17}

Organisational barriers

Excessive workload-particularly among women demanding programme schedules, and unsupportive workplace culture or technical constraints were identified as organisational-level barriers.^{10,17,18}

Table 1: Characteristics of included studies.

S. no.	Title	Author and year	Setting	Sample size	Popula-tion	Mean age	Male/ female	Outcomes studied
1	Balancing work and movement: barriers and enablers to physical activity in Indian workplaces (SMART STEP trial)	Chandra-sekaran et al, 2024 ¹⁰	India (Karnataka)	16 interviewed (from 18 eligible, nested in RCT)	Indian office workers (sedentary, desk-based)	Median 37.5 years	6M/ 10F	Workplace sedentary behaviour/PA barriers and enablers
2	“It’s not time for us to sit down yet”: how group exercise programmes can motivate physical activity and overcome barriers in inactive older adults	Royse et al, 2023 ¹¹	USA (Missouri)	15 interviewed (RCT had 46)	Older adults (>60 years, inactive)	Mean 72 years (range 60-86)	6M/ 9F	Motivators and barriers to group exercise
3	Numbers are not the whole story: a qualitative exploration of barriers and motivators to participation in a primary care-based physical activity intervention	Normans-ell et al, 2014 ¹²	UK (South-West London)	43 interviewees (RCT had 1023)	Mid-life and older adults (45-75 years, inactive)	45-75 years (range)	14M / 29F	Barriers and facilitators to walking; response to BCTs
4	Exercise facilitators and barriers from adoption to maintenance in the diabetes aerobic and resistance exercise trial	Tulloch et al, 2013 ¹³	Canada (Ottawa/Calgary)	28 interviewed (from 54 approached)	Adults with type 2 diabetes (39-70 years)	Mean 55.7 years	71% men	Adoption versus maintenance of exercise
5	Perceived facilitators, barriers, and changes in a randomized exercise trial for obese youth: a qualitative inquiry	Peeters et al, 2012 ¹⁴	Canada (Ottawa)	44 at baseline; 25 at 3 months; 24 at 6 months	Obese youth (14-18 years)	Mean 16.7 years	52% male	Exercise facilitators, barriers, and outcomes
6	Barriers and facilitators to walking and physical activity among American Indian elders	Sawchuk et al, 2011 ¹⁵	USA (Seattle, WA)	75 elders (from 125 invited)	American Indian elders (50-74 years, sedentary)	Mean ~62 years	Simi-lar M/F	Walking behaviours, barriers, facilitators, HRQoL
7	Do neighborhood environments moderate the effect of physical activity lifestyle interventions in adults?	Kerr et al, 2010 ¹⁶	USA (San Diego County)	842 adults (401 women, 441 men in 2 RCTs)	Overweig-ht adults (25-55 years)	Men ~42 years; Women ~44 years	Both sexes	Walking minutes, neighbourhood walkability
8	Understanding physical activity facilitators and barriers during and following a supervised exercise programme in type 2 diabetes: a qualitative study	Casey et al, 2009 ¹⁸	Canada (Montreal, QC)	16 focus-group participants (from 42 trial participants)	Adults with type 2 diabetes	Mean 52.5 years	9M / 7F	Barriers/ facilitators during and after supervised programme
9	The impact of technology on promoting physical activity and mental health: a gender-based study	Liu et al, 2023 ¹⁷	China (Zhengzhou University)	300 (150 intervention, 150 control) +20 interviews	University employees	Mean not sp-ecified (~20-50 years)	Equal M/F	PA levels, mental health, gender differences

Table 2: Summary of identified motivators and barriers to physical activity.

Domain	Motivators/facilitators	Barriers/challenges
Individual	Perceived physical benefits (weight loss, fitness, energy); psychological benefits (confidence, stress relief, mental health); intrinsic motivation, self-efficacy; smartphone reminders, progress tracking, personalisation	Poor goal-setting; low awareness of sedentary risks; lack of sustained motivation/habit formation; fatigue, low energy; fear of falling or injury; pre-existing health conditions; lack of interest
Interpersonal	Family/friends' influence; social support, peer encouragement; group exercise, class instructors; desire to care for family; role modelling, social interaction	Lack of peer support; derogatory comments, unwanted attention; lack of companionship for exercise; family/cultural responsibilities (especially dual workload for women)
Organisational/workplace	Financial incentives; structured routines, flexible scheduling; workplace facilities (where available); instructor feedback	Heavy workload; rigid programme schedules; workplace culture unsupportive of PA; absence of workplace facilities; technical issues with tracking tools
Environmental	Favourable weather; proximity to points of interest/shopping areas; accessible facilities; walkable neighbourhoods (greater benefit observed in men)	Adverse weather; transport and accessibility issues; location constraints; environmental obstacles (low walkability, unsafe spaces)
Programme related	Structured exercise programmes; resistance-training groups showed better maintenance; incentives and rewards; competitive elements	Difficulty maintaining routine after programme ends; time/location conflicts (schoolwork, social obligations); decline in motivation over time

Social and environmental barriers

Derogatory comments, unwanted attention, and lack of workplace facilities for physical activity were reported alongside time, location, and cost constraints, adverse weather (16-32%), insufficient social support, and exercise programmes that did not align with participants' abilities or preferences.^{10,11,15,17,18} Notably, men residing in low-walkability neighbourhoods increased their daily walking time by 29 minutes from baseline at 12 months, compared with an attenuation of 10 minutes among men in high-walkability neighbourhoods; no, statistically significant change was observed among women, suggesting that environmental modification may differentially benefit men and women.¹⁶

DISCUSSION

Physical inactivity, once considered predominantly a concern of high-income countries, is increasingly prevalent in low- and middle-income countries.¹⁹ It represents a major modifiable risk factor for chronic conditions including dyslipidaemia, diabetes, hypertension, and obesity, underscoring the need to address its underlying determinants. This review identified personal health benefits, social support, environmental and workplace factors, and programme structure as key determinants of physical activity engagement and adherence. Gender, geographic region, and workplace culture were found to modulate these determinants in distinct ways. Differences in societal roles-such as caregiving responsibilities, safety concerns, and domestic obligations-contribute to lower activity levels among women relative to men. Geographic disparities were also evident: in Sub-Saharan Africa, inadequate facilities and

financial constraints were major barriers, whereas in Latin America, street crime and a shortage of parks and outdoor spaces limited physical activity. Excessive workload, inadequate facilities, and rigid organisational structures further constrained activity levels within occupational settings.

Addressing these disparities in a timely manner could substantially improve physical activity levels and reduce the burden of associated chronic diseases.²¹ For women, strategies such as safe exercise spaces, flexible scheduling, equitable distribution of domestic responsibilities, family encouragement, and structured group activities (e.g., yoga) may be beneficial. Region-specific interventions-including community-led initiatives, public health campaigns, and free exercise programmes-can help address local barriers. At the organisational level, policies supporting flexible scheduling, on-site facilities, and incentive structures may facilitate engagement, while broader urban planning and infrastructure investment remain critical to promoting physical activity at the population level.²⁴ These findings underscore that a one-size-fits-all approach is unlikely to be effective; interventions must instead be tailored to the specific determinants relevant to the target population.²⁰

These findings are consistent with the existing literature, which similarly identifies comorbidities, time constraints, adverse weather, and lack of support or supervision as prominent barriers to exercise.²⁵⁻²⁷ Other studies have highlighted family support as a facilitator, alongside barriers such as unsafe neighbourhoods and cultural expectations-for example, restrictions on women's participation in mixed-sex exercise settings.²⁵⁻²⁷

Effective interventions must address these determinants concurrently across multiple levels. At the individual level,

goal-setting, health education, and motivational strategies may support engagement. At the interpersonal level, peer and family support and group-based programmes may enhance adherence. Organisational strategies-such as workplace amenities, flexible scheduling, and incentive programmes-can help create supportive environments, while environmental-level interventions, including safe and accessible spaces and effective transport infrastructure, remain essential.

CONCLUSION

Motivators and barriers to physical activity are shaped by an interplay of personal, social, and environmental determinants. Future research should focus on developing and evaluating scalable, context-specific interventions, with particular attention to equity, gender, and long-term sustainability. Such an evidence-based, comprehensive approach is essential to guide the development of effective, equitable, and sustainable strategies to combat physical inactivity worldwide.

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REFERENCES

- Pedersen BK, Saltin B. Exercise as medicine - evidence for prescribing exercise as therapy in 26 different chronic diseases. *Scand J Med Sci Sports*. 2015;25(3):1-72.
- World Health Organization. WHO Guidelines on Physical Activity and Sedentary Behaviour. 2020. Available at: <https://www.who.int/publications/i/item/9789240015128>. Accessed on 25 August 2026.
- Ashton LM, Hutchesson MJ, Rollo ME, Morgan PJ, Collins CE. Motivators and Barriers to Engaging in Healthy Eating and Physical Activity. *Am J Mens Health*. 2017;11(2):330-43.
- Miller W, Brown PR. Motivators, facilitators, and barriers to physical activity in older adults: a qualitative study. *Holist Nurs Pract*. 2017;31(4):216-24.
- Liu R, Sui X, Laditka JN, Church TS, Colabianchi N, Hussey J, et al. Cardiorespiratory fitness as a predictor of dementia mortality in men and women. *Med Sci Sports Exerc*. 2012;44(2):253-9.
- Parker K, Timperio A, Salmon J, Villanueva K, Brown H, Esteban-Cornejo I, et al. Activity-related typologies and longitudinal change in physical activity and sedentary time in children and adolescents: The UP&DOWN Study. *J Sport Health Sci*. 2021;10(4):447-53.
- Lloyd-Jones DM, Lewis CE, Schreiner PJ, Shikany JM, Sidney S, Reis JP. The Coronary Artery Risk Development In Young Adults (CARDIA) Study: JACC Focus Seminar 8/8. *J Am Coll Cardiol*. 2021;78(3):260-77.
- Rosselli M, Ermini E, Tosi B, Boddi M, Stefani L, Toncelli L, et al. Gender differences in barriers to physical activity among adolescents. *Nutr Metab Cardiovasc Dis*. 2020;30(9):1582-9.
- Peng B, Ng JYY, Ha AS. Barriers and facilitators to physical activity for young adult women: a systematic review and thematic synthesis of qualitative literature. *Int J Behav Nutr Phys Act*. 2023;20(1):23.
- Chandrasekaran B, Arumugam A, Pesola AJ, Rao CR. "Balancing work and movement": barriers and enablers for being physically active at Indian workplaces - findings from SMART STEP trial. *Int J Behav Nutr Phys Act*. 2024;21(1):110.
- Royse LA, Baker BS, Warne-Griggs MD, Miller K, Weitzel KJ, Ball SD, et al. "It's not time for us to sit down yet": how group exercise programs can motivate physical activity and overcome barriers in inactive older adults. *Int J Qual Stud Health Well-being*. 2023;18(1):2216034.
- Normansell R, Smith J, Victor C, Cook DG, Kerry S, Iliffe S, et al. Numbers are not the whole story: a qualitative exploration of barriers and facilitators to increased physical activity in a primary care based walking intervention. *BMC Public Health*. 2014;15:1272.
- Tulloch H, Sweet SN, Fortier M, Capstick G, Kenny GP, Sigal RJ. Exercise facilitators and barriers from adoption to maintenance in the diabetes aerobic and resistance exercise trial. *Can J Diabetes*. 2013;37(6):367-74.
- Peeters C, Marchand H, Tulloch H, Sigal RJ, Goldfield GS, Hadjiyannakis S, et al. Perceived facilitators, barriers, and changes in a randomized exercise trial for obese youth: a qualitative inquiry. *J Phys Act Health*. 2012;9(5):650-60.
- Sawchuk CN, Russo JE, Bogart A, Charles S, Goldberg J, Forquera R, et al. Barriers and facilitators to walking and physical activity among American Indian elders. *Prev Chronic Dis*. 2011;8(3):A63.
- Kerr J, Norman GJ, Adams MA, Ryan S, Frank L, Sallis JF, et al. Do neighborhood environments moderate the effect of physical activity lifestyle interventions in adults? *Health Place*. 2010;16(5):903-8.
- Liu Y, Zhang H, Xu R. The impact of technology on promoting physical activities and mental health: a gender-based study. *BMC Psychol*. 2023;11(1):298.
- Casey D, De Civita M, Dasgupta K. Understanding physical activity facilitators and barriers during and following a supervised exercise programme in type 2 diabetes: a qualitative study. *Diabet Med*. 2010;27(1):79-84.
- Hallal PC, Andersen LB, Bull FC, Guthold R, Haskell W, Ekelund U, et al. Global physical activity levels: surveillance progress, pitfalls, and prospects. *Lancet*. 2012;380(9838):247-57.
- Guthold R, Stevens GA, Riley LM, Bull FC. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358

- population-based surveys with 1.9 million participants. *Lancet Glob Health*. 2018;6(10):e1077-86.
21. Bauman AE, Reis RS, Sallis JF, Wells JC, Loos RJ, Martin BW, et al. Correlates of physical activity: why are some people physically active and others not? *Lancet*. 2012;380(9838):258-71.
 22. Kohl HW 3rd, Craig CL, Lambert EV, Inoue S, Alkandari JR, Leetongin G, et al. The pandemic of physical inactivity: global action for public health. *Lancet*. 2012;380(9838):294-305.
 23. Tremblay MS, Aubert S, Barnes JD, Saunders TJ, Carson V, Latimer-Cheung AE, et al. Sedentary Behavior Research Network (SBRN) terminology consensus project. *Int J Behav Nutr Phys Act*. 2017;14:75.
 24. Aneesh M, Mahanta N. Physical activity levels, motivators and barriers to exercise among men and women aged 30 to 50 years in Rourkela, India. *J Midlife Health*. 2022;13(4):278-87.
 25. Lawton J, Ahmad N, Hanna L, Douglas M, Hallowell N. 'I can't do any serious exercise': barriers to physical activity amongst people of Pakistani and Indian origin with type 2 diabetes. *Health Educ Res*. 2006;21:43-54.
 26. Mier N, Medina AA, Ory MG. Mexican Americans with type 2 diabetes: perspectives on definitions, motivators, and programmes of physical activity. *Prev Chronic Dis*. 2007;4:A24.
 27. Dye CJ, Haley-Zitlin V, Willoughby D. Insights from older adults with type 2 diabetes: making dietary and exercise changes. *Diabetes Educ*. 2003;29:116-27.

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