The Green Prescription programme and the experiences of Pacific women in Auckland

Nicola Tava'e BHSc, PGDip PH, MPH (Hons);[1] **Vili Nosa** BA, MA (Hons), PhD[2]

[1] PhD student, School of Public Health, Social Health Outcomes and Research Evaluation (SHORE) and Whariki Research, Massey University, Auckland, New Zealand

[2] Senior Lecturer, Pacific Health, School of Population Health, The University of Auckland, Auckland

ABSTRACT

INTRODUCTION: Extensive research has shown the effectiveness and cost-effectiveness of the Green Prescription (GRx) but none has focused on the experiences of Pacific women who have been through the GRx programme. The research aim was to investigate the experience of the GRx programme for Pacific women in Auckland, New Zealand.

METHODS: Qualitative data from in-depth interviews with 20 Pacific women aged 40 years and older, who had been members of a GRx programme in Auckland City and Counties Manukau and had been discharged as independently active.

FINDINGS: Pacific women had positive experiences of the GRx programme and identified an improvement in their physical activity, lifestyle behaviours and consequent health improvements. Positive experiences can be attributable to the social and friendly atmosphere created by their peers and staff, exercise options, and education workshop components. The social aspect of the GRx programme was the primary reason the women enjoyed and completed the programme.

CONCLUSION: Pacific women reported health improvements from participation in the GRx programme. Further research is indicated to explore the health impact of the GRx for Pacific people and the benefits and acceptability of the programme for Pacific ethnic groups.

KEYWORDS: Exercise referral schemes; Green Prescription; Pacific women; physical activity

Introduction

The Ministry of Health (MoH) report that physical activity is the second highest modifiable risk factor for poor health, the first being smoking. Inactivity contributes to 8% of all deaths in New Zealand.[1] Green Prescription (GRx) was a Sport and Recreation New Zealand (SPARC) initiative started in 1998. SPARC, previously known as the Hillary Commission, is the main government agency responsible for promoting physical activity in New Zealand.[2] Due to its emphasis on health outcomes and its association with health professionals and providers, the GRx is now contracted through the MoH.[3]

A GRx is a written advice from a health professional that recommends getting more physically active to benefit health. The GRx initiative was established as a response to the high rates of inactivity in New Zealand and its associated health costs.[4] It has been tailored to engage inactive adults, in particular those groups with high rates of physical inactivity—adults with low socioeconomic status, and Maori and Pacific people.[3]

The initiative delivery can be likened to physical activity schemes in the United Kingdom that have delivered physical activity programmes at a community level through the general practice setting;[5,6] however, the effects of exercise referral schemes in primary care on physical activity and improving health outcomes are conflicting.[7] In addition to physical activity, GRx incorporates education workshops that cover related topics such as nutrition, medical conditions, smoking etc. Figure 1 outlines the GRx process for a referred person.[3]

Extensive research has shown the effectiveness and cost-effectiveness of the GRx programme.[2,4]

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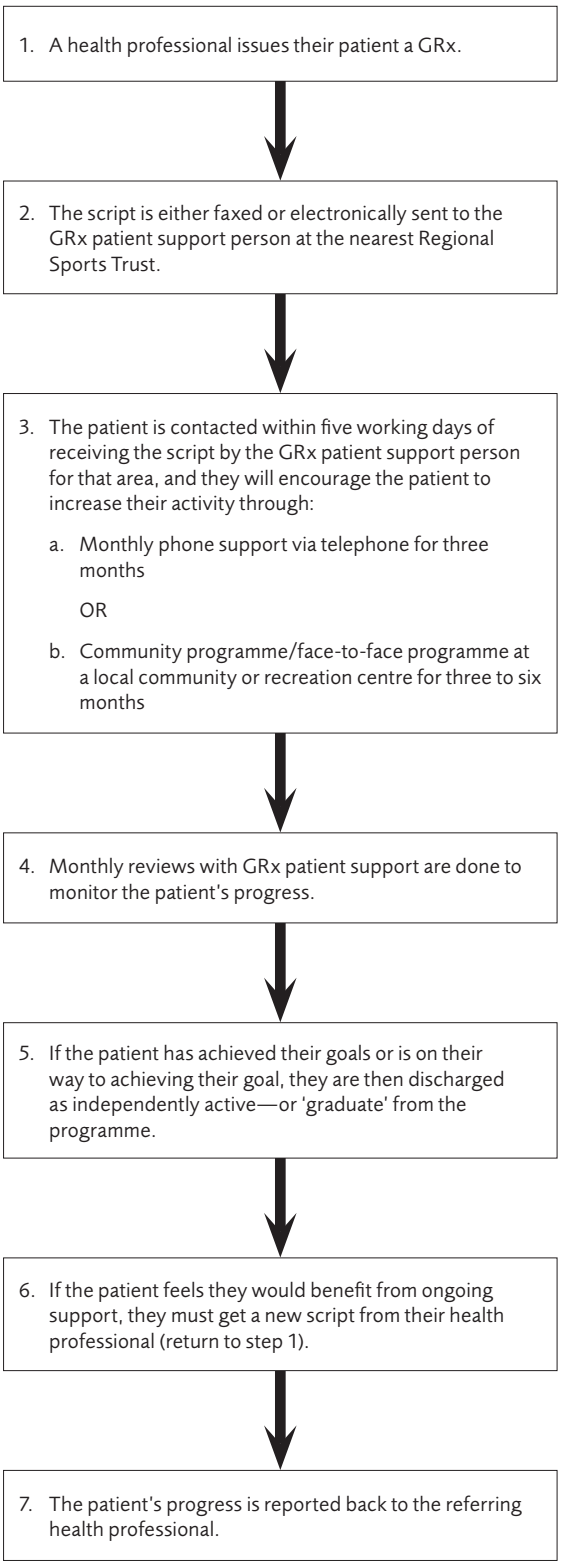
CORRESPONDENCE TO:
Nicola Tava'e
PO Box 6137, Wellesley St, Auckland, New Zealand
n.tavae@massey.ac.nz

Figure 1. GRx referral process



However, no research has explored the experiences of Pacific women on the GRx programme. This seems highly relevant due to the non-communicable diseases afflicting high numbers of Pacific women, such as cardiovascular disease, ischaemic heart disease, cervical cancer, and lung cancer; diseases associated with behavioural and lifestyle choices such as physical inactivity, poor nutrition and smoking.[8,9,10]

The aim of this paper is to investigate experiences of the GRx programme from Pacific women's perspectives in Auckland, New Zealand.

Methods

The sample group comprised 20 Pacific women aged 40 years old and over who had been members of a GRx programme and had been discharged as independently active. The length of time from being discharged from the programme to interviews ranged from three weeks to two years. Being discharged as 'independently active' means that these women are also 'graduates' of the programme. This signifies that they have achieved, or are on their way to achieving, the goals that they had set when they started the GRx programme.

Purposive sampling was used to recruit Pacific women as participants for the research. A search for potential participants was conducted by the GRx administrator through the Patient Management System (GRx database) and women identified were invited to participate in the study via mail. Interviews were semi-structured, lasting approximately 60–90 minutes, and were conducted individually and face-to-face at the participant's home or the GRx programme. All but one interview were audiotaped.

Data analysis included the use of open coding and grouping responses into common themes. Axial coding was finding commonalities between these groups, particularly by identifying themes and subthemes. The labelling process in axial coding involves grouping data under themes and subthemes. Selective coding is selecting the main themes, validating this through defining them and producing evidence phrases.[11,12] This research was part of a Master's thesis completed from

July 2009 to July 2010. Ethics approval was granted by The University of Auckland Human Subjects Ethics Committee. Informal discussions concerning cultural issues were regularly conducted with Pacific GRx Patient Support People (PSP—programme facilitators). The research team are also of Pacific descent and have a wealth of knowledge in Pacific research processes, protocols and practices.

Findings

Common themes emerged from the participants' experiences. Findings are presented under the given themes. Quotes from the participants were extracted from interview transcriptions. They have been edited by removing fillers such as 'um' and 'uh', correcting occasional grammatical errors, and inserting pronouns or punctuation marks to improve reading structure.

1. History of physical activity prior to GRx

The majority of participants reported being more physically active in their past through sport or work, but this steadily reduced as they grew older due to increasing family and work commitments. Most of the participants described themselves as sedentary prior to joining the GRx programme. They had no interest in physical activity due to a lack of time, the cost, or simply not enjoying exercise that was intended for the purpose of being active.

> I was really active when I was younger. I used to play all the sports at school. I loved netball and touch [rugby], and I used to play representative level. But then when I left school, it got hard to play sport. I was working... I had no time to go to practice or the games. I had no money to pay for the fees and uniform because my parents used to pay for all of that. So eventually my priorities changed, and I became less active. (P3)

Most of the participants identified cost as a factor that stopped them doing physical activity. For them, physical activity could only be regularly achieved through facilities such as the gym or exercise classes as it took them away from home and provided them with instructors who could show them the best exercises for their personal benefits. Participants didn't see the health benefits of being physically active as a valid reason to outweigh paying large sums of money for exercise facilities like the gym or classes, especially when money was best spent elsewhere.

> I would rather have used my money for the family; put food on the table, a roof over their head, pay the bills. All of that, rather than spend it on going to the gym. That would be selfish. So it was good to only pay [GRx] the $2.50 to use the gym through the week. It is really cheap, and I don't have to feel guilty using up the family money. (P2)

2. GRx programme

All of the participants had positive experiences of the GRx programme. On their first day, they stated that the friendly staff, a supportive environment, and being greeted by a warm, friendly person were the reasons for this positive experience.

> The people were really nice. There were heaps of people... [They] were really nice and made me feel comfortable. (P17)

Most of the participants enjoyed the programme components such as the exercise classes and health talks. Enjoying activities meant participants attended classes more regularly and, as a result, experienced positive health outcomes such

WHAT GAP THIS FILLS

What we already know: Research shows the cost-effectiveness and effectiveness of the Green Prescription (GRx) programme in New Zealand, and relevant programmes in the general practice setting in the UK. Obesity, physical inactivity and other lifestyle behaviours that lead to intermediate risk factors of high blood pressure, hypercholesterolaemia, diabetes and ultimately cardiovascular, renal and other morbidity and avoidable mortality are serious problems in the Pacific (and other) communities in NZ.

What this study adds: This study provides a voice to Pacific women's experiences of the GRx programme. No previous research had been conducted on the experiences of the GRx programme from their perspective. Assessing the experiences of those using such individual and group interventions as the GRx may help to promote and improve them and so help address particular health issues.

as weight loss, improved medical conditions and increased fitness levels.

> I found the programme [GRx] is really working for me because I used to be really breathless when I did the exercise. But now when I'm on the walking machine... I'm still talking to the person next to me... I think, wow, I've done all that while talking. Then I feel better. I must be getting fitter. (P5)

Health talks were found to be informative; they provided a wealth of information and covered a variety of topics. Most of the participants felt that the health talk topics were very relevant to their everyday lifestyle behaviours.

> The talks were really good. People would say to me, 'I never knew that' or 'that person was really good'. They liked to learn and listen. It made us learn how to be healthy, eat healthy, and look after our conditions. (P12)

> I think the health talks were the most relevant for me because I'm in a high-risk group for high blood pressure and diabetes. There is a long line of this in my family. So I found it really good to hear what the conditions are, what the best prevention and treatment is, and how to manage the conditions... (P14)

The health talks were a great socially interactive time for some of the participants, who went particularly to meet with their friends and other members.

> I wanted to attend the [talks] to get out there in the community. Friendships with people, to connect with people, and of course, to make me feel healthy, makes me feel well. But it's just the atmosphere of people; you go there and make friendships as well. I just like to be over there... (P6)

> ... We're just really good friends. Because I stay home by myself, I feel so alone. So it's good to go to see my friends... (P7)

A criticism of the programme from some of the participants was that the health talks should go back to being weekly rather than monthly (in 2009, health talks went from a weekly basis to a monthly occurrence due to administrative reasons. There were difficulties in obtaining quality speakers and attendance numbers were decreasing).

> The only thing to change is the guest speaker times. Why is it only monthly? The new people who are coming don't get to regularly listen to all these talks, like heart disease, sugar/diabetes, and what causes it. They get the information only in doses, when they remember to attend, and then they have to wait for a whole month before listening to another talk. So it's good to continue the talks weekly for the new people that are coming into the programme. (P4)

3. Influences on programme adherence or dropout rates

Adherence to physical activity

Factors that encouraged the participants to adhere to their physical activity regimes were put into three categories:

- environmental stimuli
- personal incentives, and
- social support.

Environmental stimuli were environmental factors that enabled them to attend exercise classes or access facilities—these included having their own vehicle or easy access to transport (public or private). Personal incentives were personal circumstances that enabled participants to be physically active. These included health conditions and not working.

> Now that I don't work, and all my kids have moved out, I can do my own thing. I was always busy with work, but now I have time to go and do my exercise, in my own time. I don't have to plan around work or kids. (P15)

Social support mechanisms included encouraging friends and family members who acted as a support person, an exercise companion, or helped with transport.

> My friend... she's been at GRx for a long time. She comes and picks me up, takes me to the programme and then drops me home afterwards. If it wasn't for her, I probably wouldn't go. (P7)

Barriers to physical activity

Barriers to physical activity were factors that hindered or prevented the participants from physical activities and were grouped under two headings:

- environmental barriers, and
- social barriers.

Some of the participants reported environmental barriers including lack of transport, the cost and safety of public transport, and work commitments.

> I don't go to the exercise classes because I have no transport; I don't drive. I only drive in Tonga, but when I came here to New Zealand, I'm too scared to drive. I don't have a car. So I only go if I ring my brothers, and they are free to come and take me. (P11)

Social barriers for most of the participants were family commitments, and family and friends' behaviours. Family commitments included events or occasions that clashed with exercise times, or commitments to their family such as looking after grandchildren. Family and friends' behaviours included eating unhealthy meals or choosing less active options, e.g. driving to the shops rather than walking.

> When my son buys KFC for dinner, then [sic] I can't help but eat it. It's there and it's yummy. I tell him, 'Hey, you're not helping us by buying this food'. He just smiles at me and says, 'It's OK mum, it's only a treat'. But it's not a treat when he does it all the time.' (P10)

4. Health issues

Nearly all of the participants were diagnosed with high blood pressure, diabetes or arthritis. Most of the participants had comorbid conditions and were taking medication for some, if not all, of these ailments. These health conditions were the main reason participants were referred to the GRx programme by their health professional, where support with exercise and nutrition was recommended to help improve their current health condition.

> My doctor gave me the GRx because last year I was diagnosed with diabetes. I refused to take medication for it... I know [sic] that I could control my diet—which I have... when I was diagnosed with diabetes and I started coming here [GRx], I started to change my whole lifestyle. And that's what the doctor said. The GRx will help you be healthy—do more exercise, learn to eat healthy, have talks on diabetes, and be more motivated. (P3)

All participants felt that the impact of physical activity on their medical conditions was very positive. They had made significant health improvements since joining the GRx programme. These positive health outcomes had become an incentive to maintain their active and healthy lifestyles.

> Exercise helps [my] asthma and diabetes. The doctor told me to exercise so that my diabetes would be down... he's the one that recommended it to me. And my arthritis in my knee is good [too]. (P1)

5. Completion of GRx programme

All the participants felt they were more active now than before joining the GRx programme. Their activities were not limited to the GRx programme; often participants were active independently of the programme. They described the GRx programme as a 'kick start' for a more active lifestyle, where they were given the support, encouragement and information to explore activities and options beyond the programme.

> I like swimming... I like to increase my laps. I pick[ed] up the concept of how to do the exercise when I first started GRx... I picked up the rhythm and I thought I could do it in my own time at my own intensity. So of course, I stopped going to the [GRx] class and started going by myself in the morning, Monday to Friday. (P6)

Participants, who graduated from the programme, now have various roles in the delivery of programme components. Some of the participants volunteer at the programme by doing tours, taking people to exercise classes, and helping to set up and pack up rooms.

> I like helping out at the programme. It's my turn to help others, like the programme helped me. So for new people to just see a welcoming, friendly smile would make me feel like I am doing my bit. That was a big difference for me, so I want to make a difference for others. (P2)

Some participants have completed the necessary qualifications and now have paid roles within the programme as instructors for the exercise classes such as aerobics and gymnastics.

> ...I've done my community coach training and I am an instructor at some of the GRx programmes. (P12)

Not only were the positive outcomes affecting them individually, but some participants mentioned their behaviours were having an influence on their family and friends. They were now encouraging their family and friends to join them in their exercise, or were preparing healthy meal options.

> I have encouraged my friend to come for walks with me. I also play a key role in our local community garden. (P16)

> I do the aerobic[s] and tai chi at the recreation centre; sometimes I take my mother. But sometimes... I do the tai chi class and then I come home and teach my mother. (P11)

Discussion

All the participants had positive experiences of the GRx programme and experienced many positive health outcomes. The positive experiences were mainly due to the friendly and supportive environment created by the staff, instructors and other members of the programme. This study highlighted the importance of creating a supportive and friendly environment to provide a positive experience for Pacific women. In Pacific cultures, relationships are important. Having a good person-to-person relationship and building rapport are important aspects to getting Pacific people engaged.[10] Pacific women identified social support from family, friends and other Pacific women as a factor that enabled their adherence to physical activity. Social support is important to Pacific women; it is their relationship with others that gives them a sense of belonging and creates a sense of responsibility to their peers. Pacific culture is based on relationships—with God, with family members, with friends, with institutions (school, work, sport) and with communities.[13]

Poor health conditions were the main reason for the participants obtaining a GRx referral. The most common health conditions were high blood pressure, diabetes and arthritis. These conditions are prevalent among the Pacific community, most commonly a result of obesity as a risk factor.[8,10] Most of the participants have comorbid diseases and are taking medication for a variety of conditions. Whether the treatment or the conditions themselves have any influence on the participants' level of activity directly or indirectly needs further research. What is evident from this study is the improved health conditions experienced, whether real or perceived, by the participants since starting the GRx programme.

Graduates of the GRx programme continue to be exercise instructors, lead exercise classes for the GRx programme and also participate in outside physical activities. Training participants and graduates to be exercise instructors and to teach is highly valuable. Not only are they testimony for current and future members that positive results are achievable, but being a member of that community, they have an established familiarity and rapport with community members, and a vested interest in positive community outputs. Literature shows that there are huge benefits to involving community leaders and members in the intervention design and implementation of health programmes.[14,15]

Participants mentioned the positive influence they had on their family and friends' physical activity and nutritional intake. This itself has huge implications on how health providers can engage families and/or family members. Pacific women's role in their family is critical. Women are the backbone of their families and communities, and are influential in their lifestyles and health.[13] Pacific women view their health as a collective of their family's health and wellbeing; their view of health is holistic and emphasises health as a property of the family rather than of an individual.[10] Pacific women play an integral role in their families, church and community networks. Their significant role lies in keeping Pacific traditions alive by creating strong networks and support structures.[10,13]

The study identified and acknowledges that there are many differences between Pacific ethnic groups. However, the participants were

considered as one group for the purposes of this research. Future research would benefit from focusing on individual Pacific ethnic groups.

There were limitations in the selection of the population sample. The sample selection was Pacific women who had graduated from the GRx programme and were therefore more likely to be physically active than those who had not yet graduated. It is also a limitation that those who chose to participate in this study may be more motivated than those who did not respond. Being graduates of the programme, they are highly likely to have had positive experiences of the programme compared to those who did not complete it.

However, having GRx graduate participants provided insight into the positive aspects of the GRx programme that made them join, continue and complete it with positive results. This has implications for current and future programmes to implement and/or emphasise such aspects. Further research on those who were referred to GRx but did not graduate would provide further understanding of negative aspects or aspects of the programme that were missing (from their perspective).

The time period from when participants had graduated from the GRx programme varied. The most recent graduate was in June 2009, and the earliest graduate was from October 2007. The GRx programme had undergone many changes between October 2007 and June 2009. Therefore, participant feedback on the GRx programme may be based on components of the programme that no longer exist. Also, some participants may not be able to recollect the true experience of the programme due to the time elapsed since completing it.

The strength of this research is that it is Pacific research, for Pacific women, by Pacific women. The results are their words, their experiences; their stories. Pacific women themselves are able to identify the issues that concern them most; the issues they find significant, and are able to contribute to the literature about and for Pacific women in general. There are no current studies in New Zealand that investigate the perspectives and experiences of Pacific women and physical activity specifically. This project therefore was exploratory. It identified themes and issues that Pacific women regard as important and provided a baseline in terms of both information and methods, for future research in this area.

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COMPETING INTERESTS
None declared