

# Nourish Your Bones: A Pilot Programme to Improve Nutrition Knowledge for Bone Health in a Community Hospital

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## Aim

To increase the patient's awareness, knowledge and confidence to make better food choices for bone health in a facilitated group programme.

## Background

Nutrition is an important part of bone health. In Yishun Community Hospital, dietitians usually provide 1-1 individualised care to patients referred by the Multi-Disciplinary Team (MDT). However, not all patients are referred to the dietitian. This results in missed opportunity for nutrition education.

Nourish Your Bones Programme aims to increase awareness, knowledge, and confidence to make better food choices for bone health. This dietitian-facilitated programme uses interactive activities to cultivate knowledge and foster peer sharing and discussion.

## Team Members

Name	Designation	Department
Shanmugavel Sharanya	Senior Staff Nurse	Ward D67
Bacleon Jean	Senior Staff Nurse	Ward D67
Arigorat May	Sr Care Support Associate	Ward D67
Sivasubramaniyan Tamilselvi	Enrolled Nurse	Ward D67
Foong Pamela	Nurse Manager	Ward D67
Chan Sue Mei	Principal Dietitian	Nutrition & Dietetics

## Interventions / Implementation

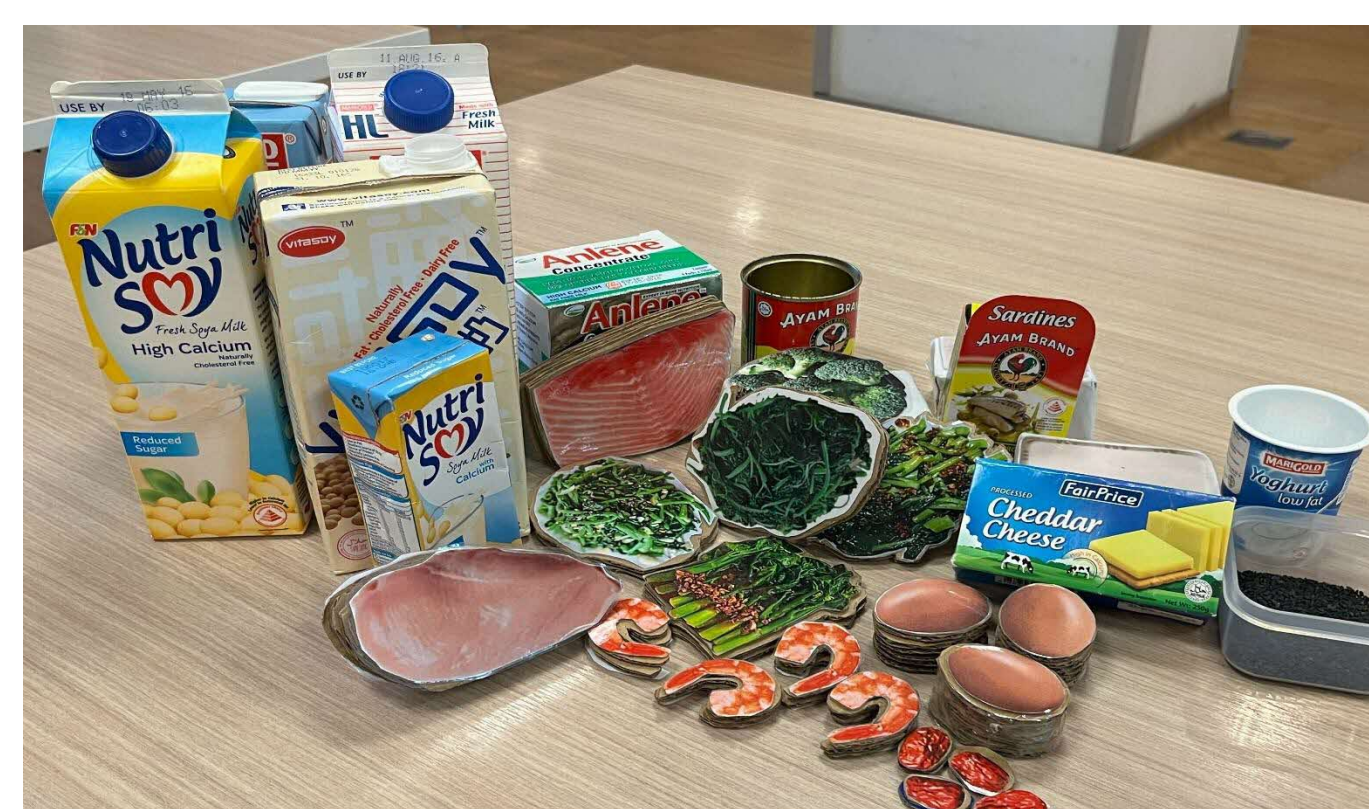
Patients were identified and recruited by the Multi-Disciplinary Team.

- Inclusion criteria: Patients with a diagnosis of fracture or total knee replacement (TKR) and a sitting tolerance of 60 minutes.
- Exclusion criteria: Patients with contact precaution and diagnosis of cognitive impairment.

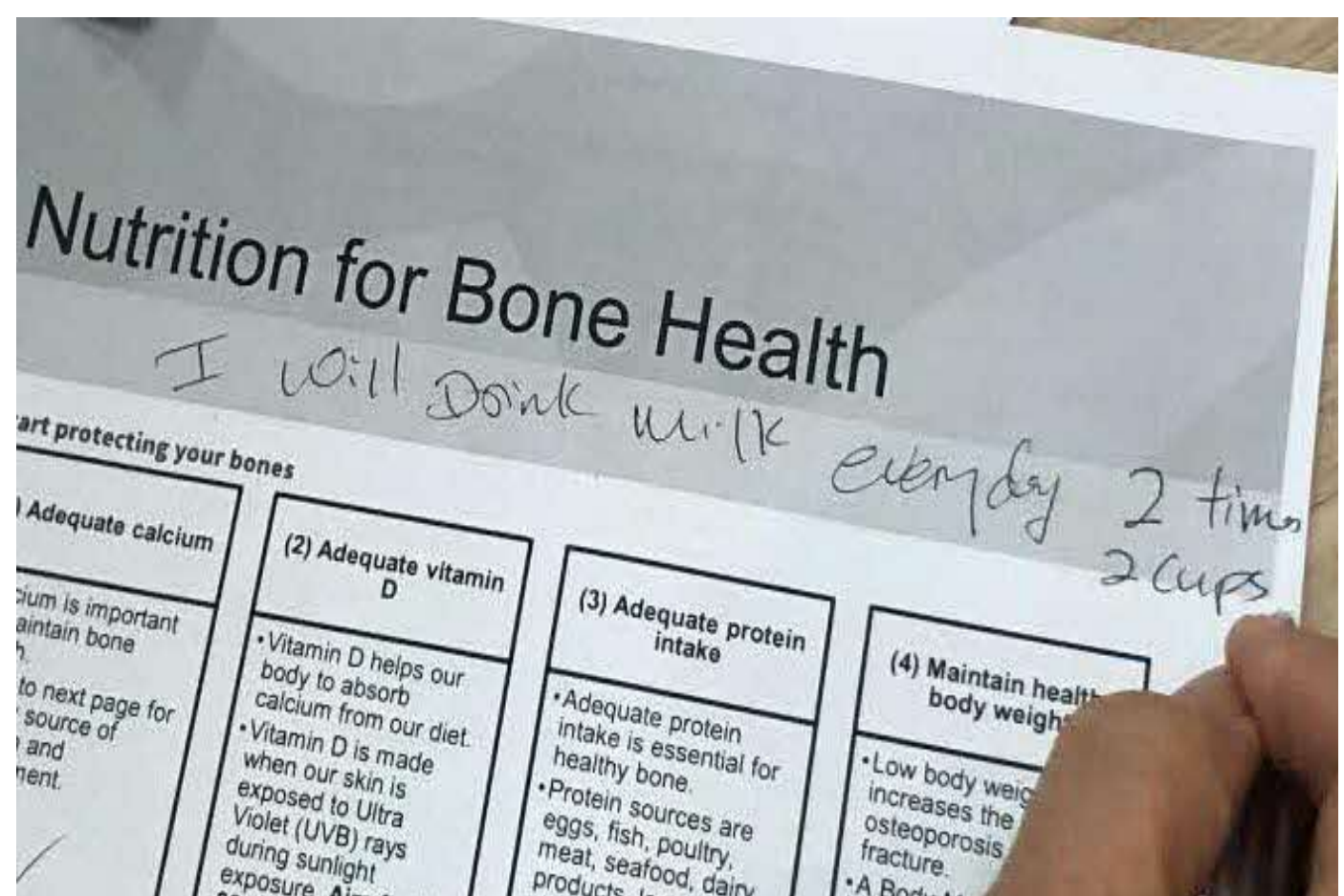
The 1 hour session includes a mini lecture, interactive games and a facilitated discussion on foods containing protein, calcium and vitamin D with the use of food cards and 3D food models.



Group discussion to identify local foods that are good for bone health.



Food models used for hands-on learning.



Personal nutrition goal set by one of the participants.



Participants engaging in the interactive true and false game.

- A pre and post questionnaire consisting of 5 questions was administered to assess the patient's nutrition awareness and knowledge.
- Confidence level was also recorded on a scale of 1-10 pre and post programme.

## Onward 2026

Strategic Priority 4: Manage and Prevent Frailty

Frailty is associated with a higher risk of osteoporosis and fracture. It is important to increase the knowledge of the patients on nutrition so that they can better take care of their bone health.

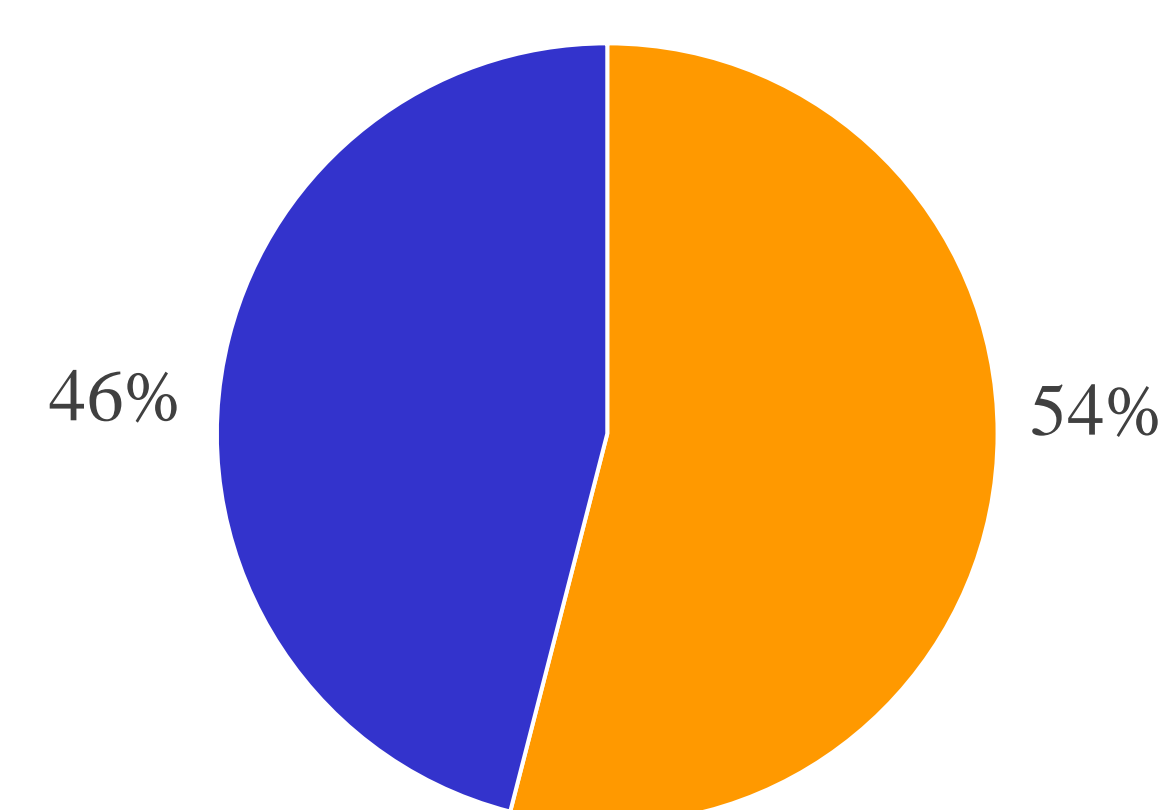
Quality and Patient Safety: Improving the quality of care by providing nutrition education in a conducive environment which is interactive and allows for peer discussion and support for patients.

## Results & Outcomes

Total of 24 patients were recruited and attended the programme over 4 sessions between June and September 2024.

### PRIMARY DIAGNOSIS

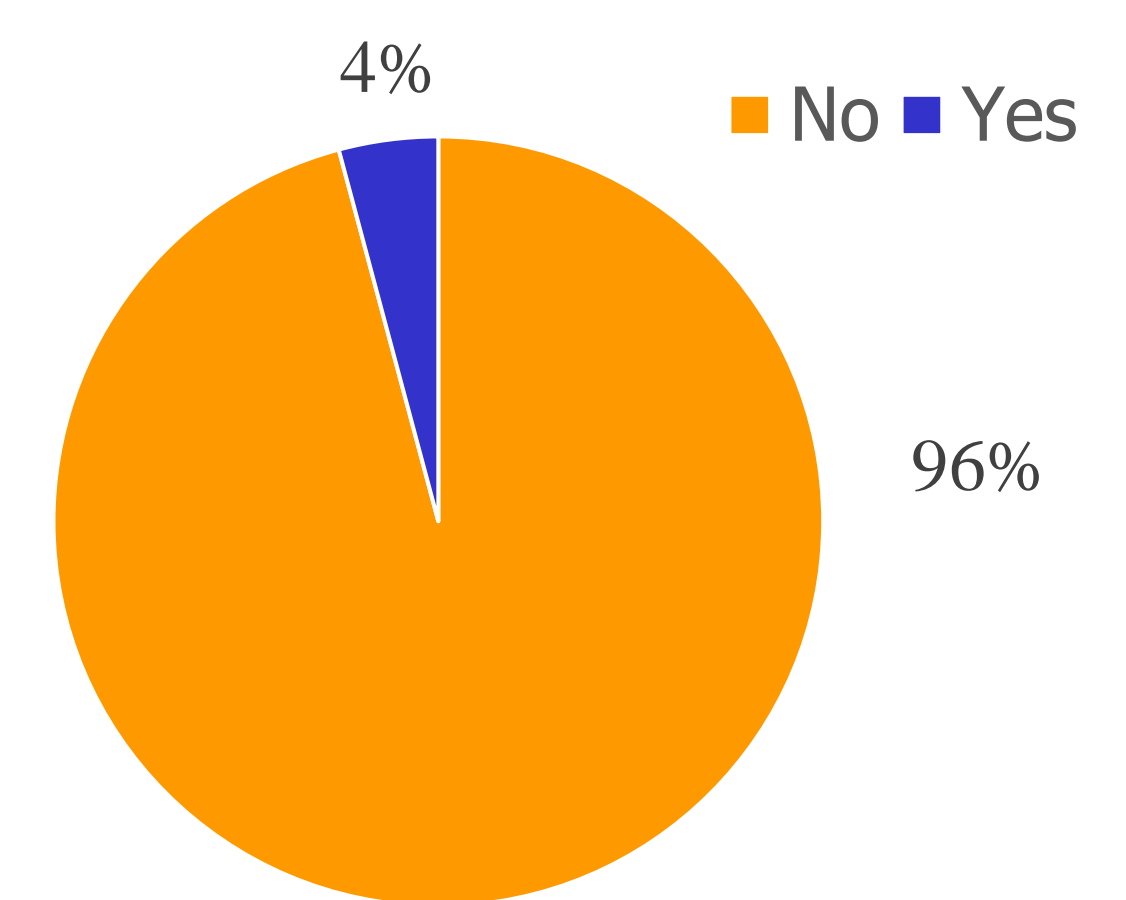
■ Fall ■ Elective admission for TKR



The selected patient had either a fall with fracture or an elective surgery for total knee replacement.

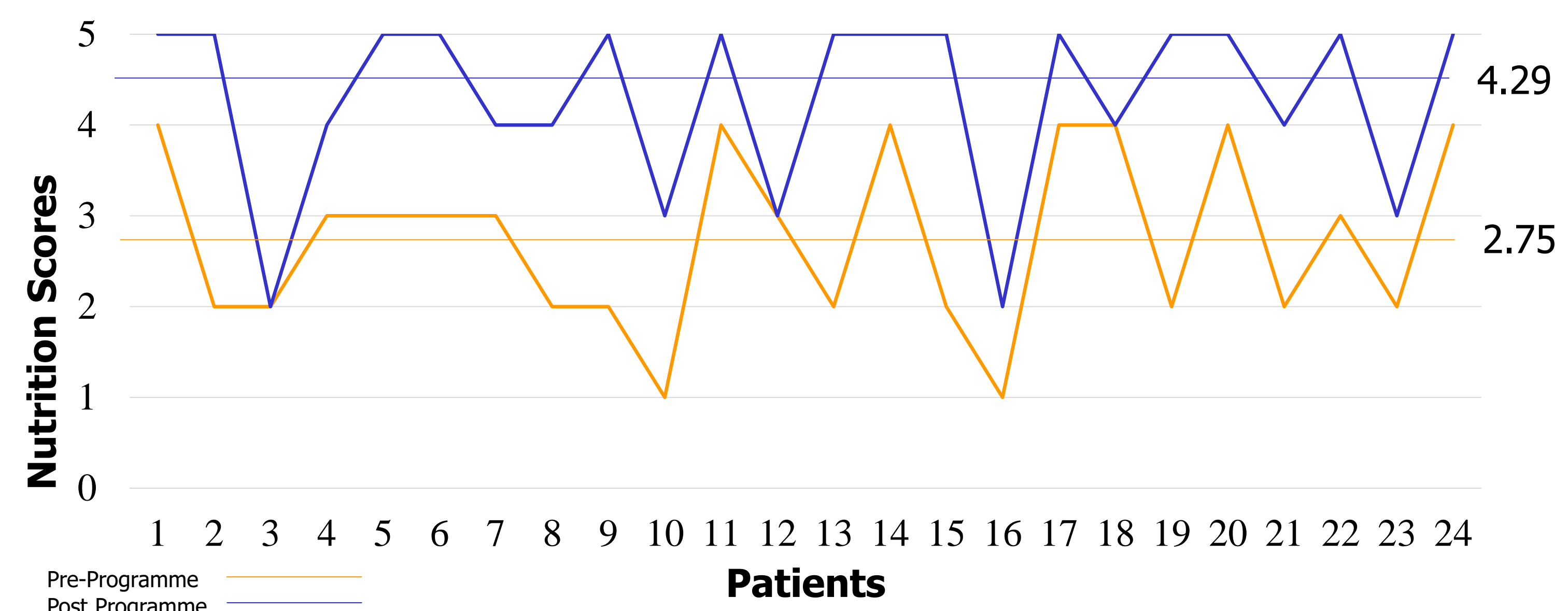
### SEEN A DIETITIAN BEFORE?

■ No ■ Yes



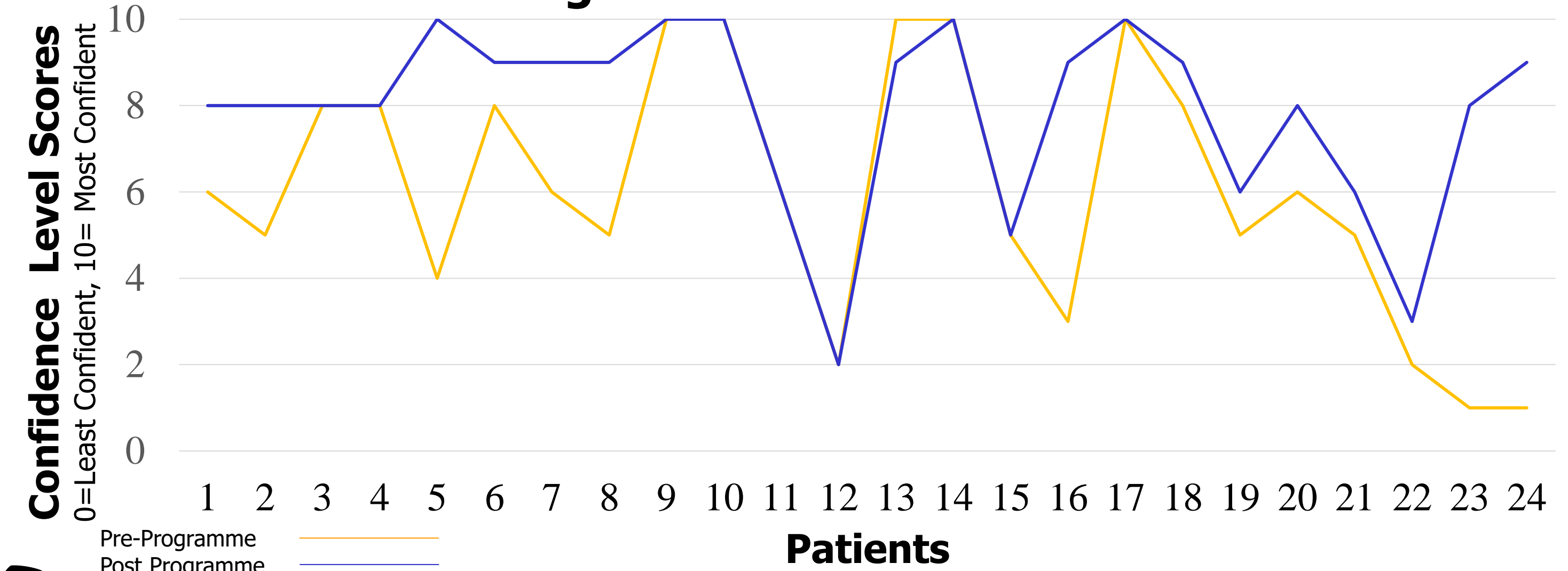
Through Nourish Your Bones, we were able to increase reach of the dietitian as 96% of patients had no prior nutrition referrals.

### Pre and Post Programme Nutrition Scores



Based on the results, 21 out of 24 patients (87.5%) showed an improvement in awareness and knowledge after the programme. In addition, the group average score increased from 2.75/5 to 4.29/5.

### Pre and Post Programme Confidence Level Scores



Based on the results, 23 out of 24 patients (95.8%) either improved or maintained their confidence levels after the programme.

## Conclusion

We were able to create an interactive and nurturing environment which helped to foster peer support and engagement amongst patients to increase nutrition knowledge for bone health. This programme provides an additional platform for dietitians to engage, empower and educate hospitalised patients in a group setting.