Knowledge and Understanding of Lifestyle Factors Relating to Sarcopenia in United Kingdom Adults Aged 45 years and Over

Marshal Achmad Wachdin (2007696781), Emma Stevenson, Wouter Peeters Population Health Sciences Institute, Newcastle University Email: m.a.wachdin2@newcastle.ac.uk

INTRODUCTION

- Based on European Working Group on Sarcopenia in Older People (EWGSOP) 2018, sarcopenia is a geriatric syndrome characterised by progressive and generalised loss of muscle mass and strength.^{1,2}
- Sarcopenia usually affects people aged 60 years and over.3
- The prevalence of sarcopenia in the world is 10% in men and 10% in women.⁴
- There are many impacts of sarcopenia, especially in the elderly population such as physical disability, reduced quality of life, and increased mortality rates.^{5,6,7}
- Sarcopenia is inevitable. However, its progression can be halted by having a good lifestyle, namely adequate protein intake and regular exercise.8,9
- There has been **no survey** investigating the general public's **knowledge**, attitude and practices (KAP) in United Kingdom (UK) on the prevention of sarcopenia.
- Previous survey on KAP in other countries have shown that people with high level of knowledge regarding sarcopenia prevention as well as exhibit positive attitudes and practices have lower risk of developing sarcopenia. 10

AIMS

The aims of this study were to:

- Assess the KAP of adults aged 45 and over in the UK towards the prevention of sarcopenia through lifestyle, namely nutrient intake and exercise.
- Find out how many respondents are at high risk of sarcopenia using the Strength, Assistance with walking, Rising from a chair, Climbing stairs, and Falls (SARC-F) questionnaire.

METHODS The validity test is using Cronbach's α for KAP Development and refinement Pilot study domains were 0.75, 0.75, and 0.81 of cross-sectional survey respectively indicating good internal Data collection starts from July consistency 11,12 24 to June 24, 2021 Surveys are made online and Survey validated disseminated using Facebook targeted advertisement Inclusion criteria: 1. Willing and able to provide informed consent after understanding the study 2. Aged 45 or over Data obtained and assessed Bloom's modified cut-off value 70% was used using the marking criteria in to evaluate respondents' KAP 13-15 table 1 Risk of < 70% > 70% Sarcopenia Good/Positive Poor/Negative **SARC-F Questionnaire** screening tools Healthy Descriptive univariate statistical were analysed to assess the overall trend of

Figure 1. Research methodology

Table 1. Questionnaire marking criteria and scoring				
Component	Marking criteria	Scoring	Output	
Knowledge & Practice (Multiple Choice)	Correct answer or in line with the recommendation	1	 Knowledge: 0 − 9 = "poor" knowledge 10 − 14 = "good" knowledge 	
	Incorrect answers, I do not know, or not in line with the recommendation	0	 Practice: 0 - 5 = not in line with the recommendations 6 - 8 = In line with the recommendations 	
Attitude (Likert Scale)	Rate from 1 (strongly disagree) to 5 (strongly agree) to the statement given	1-5	Attitude: ■ 10 – 34 = "negative" attitude ■ 35 – 50 = "positive" attitude	
SARC-F (Multiple choice)	Very difficult, unable to do so, and a lot	2	SARC-F: • < 4 = Healthy	
	A little difficult and some	1	≥ 4 = Risk of having	
	Not difficult and none	0	sarcopenia	

Newcastle University



REFERENCE (Scan Barcode)

KAP score. This analysis was completed

using SPSS software version 27.



RESULTS

Demographic Data

Table 2. Demographic data on study population (n = 123)

Population Characteristic	Population n(%)		
Age			
45 – 55 years	6 (4.9%)		
56 – 65 years	30 (24.4%)		
> 65 years	87 (70.7%)		
Gender			
Male	2 (1.6%)		
Female	120 (97.6%)		
Others	1 (0.8%)		
Ethnicity			
White British	120 (97.6%)		
White (Other)	3 (2.4%)		

Knowledge, Attitude, Practices (KAP) on Sarcopenia and its Prevention

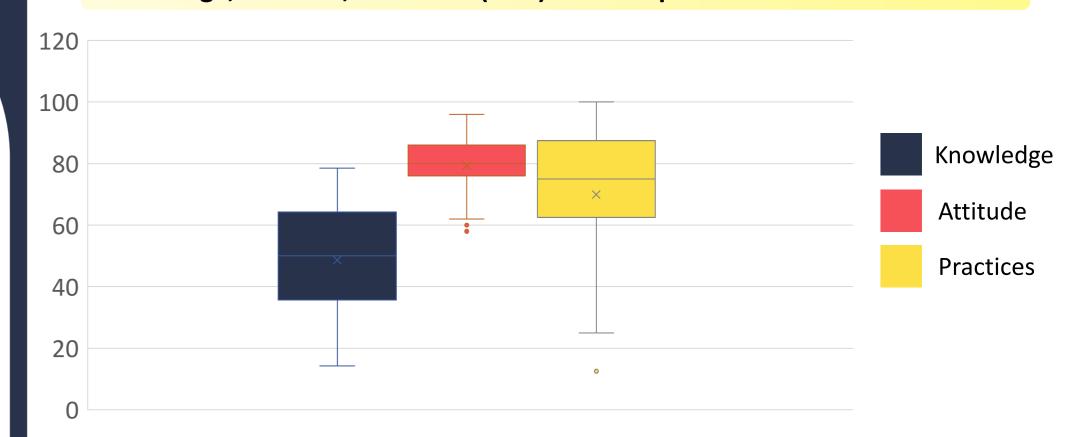


Figure 2. Median score for Knowledge, Attitude and Practices respectively

- The **median** score for **knowledge is 50%** with an interquartile (IQR) of 28.8%; attitude is 80% (IQR: 10%) and Practice is 75% (IQR: 25%)
- For knowledge, 98 respondents scored less than 70% and were considered to have poor knowledge about sarcopenia and its prevention whereas the remaining passed this cut-off
- For attitude, 110 respondents' attitude towards sarcopenia and prevention was positive. Only 13 respondents had a negative attitude
- For practice, 65 respondents had a practice in line with the recommendations while the rest (58) did not.

SARC-F Questionnaire

- Respondents who scored less than 4 are healthy, while those who scored 4 or above are considered to have a risk of developing sarcopenia
- 104 respondents (85%) were healthy, while the remaining 19 (15%) were at risk.

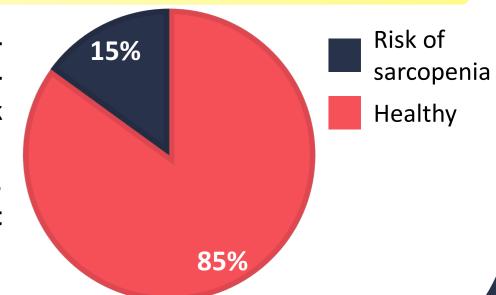


Figure 3. *SARC-F questionnaire output*

CONCLUSION

- The findings of this study suggest that the UK adults aged 45 and over demonstrate poor knowledge but positive attitude and good practices towards sarcopenia and its prevention.
- 1 out of 6 adults in this study were at risk of having sarcopenia. Hence further efforts should be directed towards raising the awareness of the disease to improve their knowledge regarding sarcopenia and its prevention