

Version of 31 October 2007

EUNAAPA – Work Package 5

**Expert Survey on Physical Activity Programmes and Physical
Activity Promotion Strategies for Older People**

National Report Denmark

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▪ **INTRODUCTION**

The European Network for Action on Ageing and Physical Activity (EUNAAPA) is committed to improving the health, wellbeing and independence of older people throughout Europe by the promotion of evidence-based physical activity.

The first aim of EUNAAPA work package No. 5 (Identify Existing Programmes for Physical Activity and Physical Activity Promotion for Older People) was to identify and describe, with the help of national experts, Danish examples of physical activity (PA) programmes for older people which were deemed to be ‘successful’. The second aim was critically to compare these programmes and strategies with evidence based guidelines identified by a systematic search of the scientific literature.

In May 2007, the EUNAAPA Partners in each participating country were asked to enlist the help of eleven physical activity Experts in their country, all recognised authorities on PA for older people. Each Expert was asked to:

- complete a short questionnaire concerned principally with the availability in their country of national qualifications in the supervision or guidance of physical activity for adults in general and for older adults in particular.
- identify a successful PA programme for older people in their country and assist its director to complete a second (longer) questionnaire, concerned primarily with the characteristics of the chosen PA programme.
- identify a successful PA promotion strategy for older people in their country and assist its director to complete a third questionnaire, concerned primarily with the characteristics of the PA promotion strategy.

The resulting data have been submitted to the leader of work package 5 (University of Edinburgh) for incorporation into a cross-national report. The present document is a national report on the data collected by and from the Danish Experts.

▪ **THE EXPERTS**

○ **Methods**

▪ **Selection of Experts**

As requested by the leader of Work Package 5, eleven Experts should be selected with the help of the matrix below (Table 1). Unfortunately this happened not do be the case in Denmark. Delayed start up and lack of essential information/documents led to inadequate use of the matrix to select the Experts. However, we tried to find Experts who were wide represented. Unfortunately, both fields, PA Programmes and PA Promotion Strategies, are not adequately represented. No questionnaires concerning PA Promotion Strategies were answered.

All of the DK Experts selected were known personally to the DK earlier Collaborating Partner, Lis Puggaard but only one of the Experts was known personally by the writer. Selected Experts were contacted by the writer by telephone imitated by an e-mail. The purpose of the project was explained to the potential Expert by the Collaborating Partner and their support was requested.

- **Distribution and return of Experts' questionnaires**

On 4/9 September 2007, each of the 9 DK Experts who had agreed to participate was sent an electronic copy of the PA Expert Questionnaire, accompanied by an explanatory letter. Also included were a template of a further explanatory letter and electronic and paper copies of the other two questionnaires for distribution, in due course, to the directors of their chosen PA programme.

PA experts were encouraged to complete and return the PA Expert questionnaires as soon as possible before 5 September. Defaulters were reminded in early September (e-mail).

- **Results**

- **Selection of Experts**

In Denmark, the selection of the PA Experts has deviated from the agreed protocol. Primarily due want of the right design of the questionnaire and the guidelines for WP5.

The EUNAAPA work in Denmark has in the middle of the holyday period been handed over to a new partner. This has made some problems but lack of adequate material did, that even the try to catch the deadlines did not give worthy outcome.

In Denmark eleven potential PA Experts were selected and nine agreed to participate. Unfortunately, in spite of reminders, four of those who had agreed to participate never returned the questionnaires. One PA Expert referred the task to hers superior, who agreed to participate instead.

Three PA Experts were selected via the other Experts.

The questionnaires used in Denmark turned out to be a draft.

Unfortunately I realized this after the questionnaires where sent out. It implies that five PA Experts answered both PA Experts questionnaires and PA Programme questionnaires. Two PA Experts only answered PA Experts questionnaires and two PA Experts only answered Programme questionnaires.

No one answered questions about Health promotion because these were not a part of the draft.

In consultation with UK partners it has been decided to use data from six PA Programme questionnaires (directors) and three PA Experts questionnaires.

One of the PA Programme directors who answered the PA programme questionnaires represents two programs.

After I received the questionnaires the answer from identical questions was transferred from the draft to the right version of questionnaires. Non coincident questions were marked as missed.

This rapport represents filled out questionnaires a total of 7 PA Programme Questionnaires and 3 PA Experts Questionnaires.

It has not been possible to ensure that the nine represented all of the primary matrix fields. Three of those who agreed participating but never returned the questionnaires represented organisations which now not are included here.

In Denmark, near the entire central organisations are, there are experts in physical activity and old people is, in one way or another, a part of the Government. Furthermore the number of Experts working with physical activity and old people is limited of the extent of the country.

As mentioned earlier 7 PA Experts have answered the Expert questionnaires (five answered PA Experts questionnaires and PA Programme questionnaires, 2 only answered PA Experts questionnaires).

The decision to let only 3 represented PA Experts implies very flimsy matrix for selection of PA Experts. The data from the remaining four questionnaires are not represented in this rapport but is according to wishes available.

Only one PA Expert represents box 1 (and 6). To Experts represented box 3.

- **Return of Experts' questionnaires**

By 05 September 2007, five of the eleven questionnaires had been returned. By 18 September nine questionnaires had been returned. Because of deadline 20 September for sending data no further reminders was sent after 18 September.

- **Experts' educational background**

PA Experts Questionnaire Question 9 emerge that two of the experts had an Exercise/sport science educational background and one Expert was Mag. Art in cultural sociology. Se Table 3.

- **Experts' areas of practice**

Experts Questionnaire question 10 shows that all three Experts had Community-dwelling older adults as a client group. Two of them worked in the sector of government and one in non governmental organisation. They all had health promotion as a professional expertise and one of them furthermore had an expertise in Sport/physical activity instruction and education.

In the version of Questionnaire these 3 Experts responded on, it does not distinguish between "national" and "regional". As an answer to the question concerning organisation level there were only two possibilities: "national or regional" and "City, town or neighbourhood". All three Experts had national, regional or both as an organisational level. Se Table 4.

	sport sector		health sector and/or social services sector		education sector (including training and professional development)	
	government	other	government	other	Government	other
National or Regional	Ministry of Sport (or equivalent) 1	NGO specialising in the delivery of recreational or competitive physical activity for older people 2	Ministry of Health or Ministry (or department) with particular responsibility for older people 3	NGO specialising in the delivery of health-related exercise for older people or sickness funds or health insurance or NGO addressing age-related issues 4	Department specialising in the training of those who deliver recreational, competitive or health-related physical activity for older people 5	NGO specialising in the training of those who deliver recreational, competitive or health-related physical activity for older people 6
						Professional association for those specialising in old age healthcare or social care 7
City or local neighbourhood	Municipal department for sport, recreation and leisure services 8	Sport or dance organisation with special interest in older people or Other organisation providing physical activity opportunities for older people 9	Municipal department responsible for healthcare services for older people or Municipal department responsible for social care services for older people 10	Local branch of a sickness fund or health insurance or Commercial provider of health-related exercise or Local branch of an NGO addressing age-related issues/providing social care for older people 11		

■
Table 1. Matrix used to guide the selection of national Experts for WP5

	PA Expert										
	A	B	C	D	E	F	G	H	I	J	K
Primary matrix field	2 (and 6)	3	3								

Table 2. Primary matrix fields of the national Experts, as perceived by the national partners when selecting the Experts.

	PA Expert											
	A	B	C	D	E	F	G	H	I	J	K	Total
Medicine												
Other Health Profession												
Exercise/ Sport Science	x		x									2
Other		x										1
Missing data												
Total												

Table 3 - Expert Questionnaire Question 9 (XQ9) . Educational backgrounds of national Experts for WP5

Expert	A	B	C	D	E	F	G	H	I	J	K
FIELD											
Physical activity programmes	x										
Physical activity (promotion) strategies		x	x								
ORGANISATIONAL LEVEL											
National		x	x								
Regional	x	x									
City, town or local neighbourhood											
CLIENT GROUP											
Community-dwelling older adults	x	x	x								
Institution-dwelling older adults											
SECTOR											
Government	x	x									
Non government organisation			x								
PROFESSIONAL EXPERTISE											
Health care											
Health promotion	x	x	x								
Educational sector											
Sport/ recreation/ physical activity facility management			x								
Sport/recreation/ physical activity instruction/ supervision/guidance											
Health-related exercise facility management											
Health-related exercise instruction/ supervision/guidance											
Education			x								

Research											
Social services, social care or social welfare											
Socio-cultural organisation											

Table 4 (XQ10). The national Experts' areas of practice

- **NATIONAL QUALIFICATIONS IN THE SUPERVISION/GUIDANCE OF PHYSICAL ACTIVITY**

- **Methods**

The PA Expert questionnaire also asked the Experts about the availability in their countries of national qualifications in the supervision or guidance of physical activity for adults in general and for older adults in particular. It asked whether such qualifications were optional or compulsory, and requested detailed information about assessment, validation and revalidation of the higher level, older-person-specific qualification. Finally, it asked about the existence in their country of a professional register of qualified instructors (*i.e.* a regulatory body that holds a current record of those qualified to guide or supervise physical activity and of their level of specialist qualification).

- **Results**

- **Basic level qualification**

The PA Experts response to PA Experts questionnaire question 11 was that no basic level qualification was available to those supervising/guiding physical activity/exercise. Questions 13 and 21 were answered “no” or “not applicable”. See Table 4 and 5.

- **Higher level qualification**

The PA Experts response to PA Experts questionnaire question 14 was that no specific higher level qualification was available to those supervising/guiding physical activity/exercise for older people. Questions 15, 16 and 17 were not answered or answered with “not applicable”. See Table 6 and 7.

- **Assessment, validation and revalidation**

The PA Experts response to PA Experts questionnaire questions 18 (table 6), 19 (table 8) and 20 (table 9) was “not applicable”.

- **Professional register**

The PA Experts response to PA Experts Questionnaire question 23 was that a professional register of qualified instructors did not exist in Denmark. Questions 24-26 were answered “not applicable”. See Table 10

	Basic level qualification	
	Available	Required
Yes		
No	3	
Don't know		
Missing Data		
Total	3	

Table 5 (XQ11 & 13). PA Experts' responses concerning the availability of a basic level qualification in supervising or guiding physical activity or exercise by adults in general in Denmark.

	Higher level qualification			
	Available	Required	Important	External verification
Yes				
No	3			
Don't know				
Missing Data		3	3	3
Total				

Table 6 (XQ 14 & 16-18). PA Experts' responses concerning the availability to a higher level qualification in supervising or guiding physical activity/exercise for older adults in Denmark

	Entry level	Higher level
0%		
25%		
50%		
75%		
100%		
Don't know		
Not applicable	3	3
Missing data		
Total		

Table 7 (XQ21 & 22). PA Experts' estimates of the prevalence of the basic, entry level qualification and the higher level (older-person-specific) qualification among instructors guiding or supervising physical activity by older participants.

	A	B	C	D	Not applicable	Don't know
Yes					3	
No						
Total						

A = Verification of current cardiopulmonary resuscitation (CPR) certification

B = Summative assessment of knowledge

C = Practical teaching competence assessed with participants of any age

D = Practical teaching competence assessed with older participants

Table 8 (XQ19). PA Experts' responses concerning the components of the assessment for the higher level (older person specific) qualification

	A	B	C	D	E	F	Not applicable
Yes							3
No							
Total							

A = Payment of fee

B = Evidence of current CPR certification

C = Evidence of continuing professional development (CPD)

D = A practical test of teaching competence

E = Other

F = Nothing

Table 9 (XQ20). PA Experts' responses concerning the requirements for retention of the higher level (older person specific) qualification

	Professional register		
	Exists	Membership requires	
		Entry level*	Higher level**
Yes			
No	3		
Don't know			
Not applicable		3	3
Missing data			
Total			

Table 10 (XQ23 & 25-26). PA Experts' responses concerning the existence in Denmark of a professional register of PA instructors and their qualifications and concerning its membership requirements for registration to supervise PA by adults in general (a basic, entry level qualification*) and by older adults in particular (a higher level qualification**)

- **‘SUCCESSFUL’ PA PROGRAMMES**

- **Methods**

- **Selection of programmes (including definitions)**

Each national Expert was asked to identify a successful PA programme for older people in their country and assist its director to complete a questionnaire concerned primarily with the characteristics of the chosen PA programme. The national Experts were instructed that their choice should be guided by the following definitions.

Physical activity (or PA) – Any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure *e.g.* running, walking, swimming, lifting or carrying a heavy weight

PA programme – A schedule of selected physical activities in which individuals can choose to engage. *e.g.* An overall programme of activities and PA opportunities for older people OR the components of such a programme, such as a programme of old time dancing classes, supervised resistance training, supervised, seated exercise classes, hill walking groups or aqua classes etc.

A successful PA programme – A PA programme is ‘successful’ if a PA expert in that country considers it to be successful. This judgment may be based on some or all of a wide range of possible effects of the programme. These might include, for example, demonstrable improvements in physical fitness or quality of life, growing membership, client loyalty, etc.

To be eligible for consideration a successful PA programme must have been running for at least 6 months and if it has ceased, this must have occurred no more than 2 years previously.

- **Distribution and return of programme questionnaires**

On 6/9 September 2007, each of the contacted DK Experts was sent a template of an explanatory letter of invitation and electronic copies of the PA programme questionnaires for distribution.

Unfortunately, The Experts did not receive the official template of an explanatory letter but only an explanatory letter written by the writer. The official template of an explanatory letter was wanted.

Therefore some information and definitions are missed or at least not expressed identical as the other countries letters. This might impact the answers.

If an invitation was declined, because the programme did not agree to participate or because the programme had already been chosen by another PA Expert, then the PA Expert was to identify another successful PA Programme and send another invitation letter.

The information concerning that PA Experts were not permitted to select their own PA Programme has not reached the PA Experts in Denmark. Therefore, this clause is presumably not valid in the Danish data.

The PA Experts were encouraged to give their PA Programme Director on-going support and to ensure that the questionnaire was returned to the WP5 coordinator by 05th September, 2007. Defaulters were reminded in, early September (e-mail) and mid September (e-mail).

Results

▪ Selection of programmes

From Denmark seven PA programmes have been selected, see details Appendix Two.

There was not problems concerning selecting the same programme more than once. There has been some discussion about whatever programmes which are a part of public service could meet the settings in this project. It have been made decision that both “Exercise on Prescription” and “Physical activity according to legislation” can be a part of the Danish contribution because it is a big part of physical activity options to old people.

Only two of the already introduced PA Experts have selected programme directors shown in Appendix two. The third Experts did not find a PA Programme Director.

Tree Programme Directors were contacted as they were PA Experts and these did fill out both PA Experts questionnaires and PA Programme questionnaires. Therefore they presumably represent their own programme (apart from “Physical activity according to legislation”). The last programme director filled out two Programme questionnaires but hers PA Experts did not return the questionnaire.

Reasons for this disorder are expounded earlier.

▪ Return of programme questionnaires

Those of the PA Experts (2) who selected a PA Programme Director took care of sending the questionnaires to the selected Programme directors. Afterwards the contact was direct between the EUNAAPA partner and

the Programme Directors. Some of the PA Programme Directors did have some linguistic problems answering the questionnaires and in spite of available help some of the PA Experts meant linguistic barriers made it difficult for some of the Pa Programme Directors to fill out the questionnaires.

▪ **Programme directors' educational backgrounds**

According to PA Programme Questionnaire Question 4. The PA Programme Directors had different educational background. There was one B.Sc in physical education and health and a physiotherapist (A), one was Master of health and physical activity (B), one Cand. Law (C), one occupational Therapist (D) and there were two physiotherapists (E(G), F), See Table 11.

▪ **Catchment areas of programmes**

According to the classification of the programme (question 9), three programmes was classified as national, two as regional and 2 were limited to a city/town. See table 12.

▪ **Ages of programmes**

Responses for how long the programme has existed (Program questionnaire question 4) four programmes had existed for 1-5 years. Two of them had existed for 6-10 years and one for more than 10 years. See table 13.

▪ **Components of overall programmes**

As mentioned earlier the Danish participants completed questionnaires different from the correct version. In the draft there was no question identical to question 11. Therefore this question was marked "missing" in most of the Programme Directors data. There existed data from one director, who was contacted by telephone. See Table 14.

According to question 12 all the PA Programme Directors described their programmes as a land-based group activity. Most of them took place indoors. Additionally, small differences were found in the description of the programmes. Se table 15.

Most of the programmes used private dwelling or sheltered housing, assisted living facility, car home or nursing home as facilities. Se table 16.

▪ **Characteristics of programmes' clients**

According to questions 14 and 15 most of the programmes were intended to age group over 65. Some of the programmes did not have an upper limit concerning age. Figure 1 show for each program the lower and upper age limit. Additionally the average is illustrated.

All of the programmes were intended to community-dwelling adults (Question 16), two of them though community-dwelling and institution-dwelling in the same group and one did have these 'categories' together in the same group. None of the programmes were alone intended to institution-dwelling older adults'. See Table 17.

Two of the programmes were intended to participant with relative low level of functional mobility whereas four programmes were indented to participants who were not reliant on assistant from another person when walking. One of the programmes does not have limitations concerning level of functional mobility. Se table 18.

In six of the programmes the percentage of women was 75%. One programme only had women participating. Se table 19

▪ **Characteristics of programmes' classes**

There were three programmes where individual exercising was possible (question 19). These were the same programmes which participants did have relative low functional mobility. The most common "group size" were 6-10 or 11-15 participants. See table 20.

According to question 20, only 5 Programme Directors putted a mark against this question. See table 21. One did not answer and one wrote that the program did not have any instructor.

There was a variation between the programmes concerning the greatest number of times per week that is possible for an individual to participate in the program (question 22). It varied from 1 hour pr week to over 8 hours per week. Se table 22.

To question 23 concerning what portion of current participant has attended the programme for at least one year the answers ranged from 25%-100%. See table 23. One Programme Director answered "don't know".

Objectives, outcomes, monitoring and feedback

Four out of seven PA Programme Directors answered that the most important overall aims of the programme was "Disease prevention". The rest answered "improved physical function". See table 24. Concerning the

second answer three Programme Directors answered that “improved physical function” were most important overall aim of the project. Two answered “improved mood” and two answered “opportunities to socialise”. See table 24 in parenthesis.

The participants satisfactory were measured in six out of seven programmes. One did not answer. See table 25.

As question 26 and 27 did not appear in the draft version of the questionnaires these questions were marked “missed” in the data. All Programme Directors did record objective outcome for participants at regular intervals. See table 25. All seven programmes have more than one objective measurement. Two programmes had marked five measurements out of the nine possibilities.

The most common objective outcome was “strength or explosive power”. “Maximal oxygen uptake (directly measured)”, “bone density” and “social support” were not outcome measurements in any of these programmes. See table 27.

Two Programme Directors mentioned maximal oxygen uptake (indirect measured) and EQ5D as objective measurements they used in their programmes.

▪ **Pre-participation assessment**

Only 3 Programme Directors answered on question 30 concerning requirement of health check of the potential participants. Two of these required assessment by a doctor, one by an exercise instructor. See table 28. (NB Assessment by an exercise instructor is missed in the table).

These three Programme Directors gave their answer per telephone as this question was not a part of the draft-version.

Only two Programme Directors answered positive on question 32 about requirement of a health screening tool. See table 29. One of these tools was not internationally recognised but the other was. Both were adapted for the present programmes. See table 30. Concerning to question 36 all the answers were “not applicable”.

Four out of seven Programme Directors answered question 37. Three of them marked “applicant must obtain approval from their doctor”. One answered “acceptance from the visitation of the Health Community Service. See table 33.

It can not be foreclosed some misunderstandings takes place in the data concerning the concept/word “Health screening tool”.

▪ **Programme content**

Concerning question 38 all answers were missing as this question did not appear absolutely identical in the draft version of the questionnaire. But in table 34 some of the aspects do appear and these aspects are coinciding

to those in question 40. In table 34 data are in parenthesis because they are not from question 38 but from 40 but deals with same aspects. In question 39 five out of seven Programme Directors marked on “chair based exercise” and four out of seven marked on “indoor walking “, “Cabel machines/fixed resistance”, Dumbells/free weight” and “resistance balls/band/tubes”. The other modalities of physical activity were dispersed marked. See table 35.

There were some differences between the draft version and the final version of the questionnaires concerning possible modalities of PA. For example; PA Programme Director directing the programme “Nordic Walking” did not in the draft version have the possibility to mark “Nordic Walking”.

Every programme had more than one modalities and the greatest number of modalities for one programme was 9 modalities of physical activity. In only one programme progression of participant was not a part of the programme. Remaining programmes did have progression as apart of the programme but it was different when in the programme the progression was prevailing. See table 36.

Concerning how long “warm up” and “cool down” was in the programme (question 42 and 43) see table 37.

One of the programmes did not have warm up nor cool down as a part of the programme and one only had a “cool down” as a part of the programme. Two programmes had a work out component lasted 30 minutes but five programmes used one hour or more to the work component. See table 38.

According to question 45 it was in all programmes possible to show regard to older people with chronic medical condition. See table 39.

▪ **Instructors’ qualifications and training**

According question 46 all Programme Directors did not ticked any of the possibilities. See table 40.

Question number 48 and 49 (table 41) was not a part of the draw.

Therefore these questionnaires were not answered and in the table they were marked “don’t know”.

Five Programme Directors answered on question 47 concerning professional register. Four of them answered that the instructors did not have to be a member of a professional register. One answered “yes”. Two was missing. See table 42.

Three programmes did not provide ongoing in-service training for the instructors (question 50). For the remaining four programmes it did vary between 1 hour per year and five hour per year for how often the in service took place. See table 43. Osteoporoses, First Aid, Diabetes,

Physiological aspect of getting older and “training principals for old people” were examples of topics covered in in-service training. Unpaid volunteers contributed to four of the programmes. (Questions 53 and 54). In three programmes they contributed with refreshment. But “buddying a participant”, “instruction”, “Peer mentoring participant” and “administration” were in some programmes a part of the job for the unpaid volunteers. See table 44.

▪ **Client safety**

Two programmes had a specific emergency protocol and two programmes had specific protocol to be followed in respect of equipment use, storage or maintenance (question 55 and 57). See table 45. Only one of these two programmes had both. There were missing answers concerning whatever the staff were trained in these protocols as these questions did not appear in the draft-version of the questionnaires.

▪ **Finance, transport and refreshments**

Only four out of seven Programme directors answered question 59 concerning the total cost of their programme. Two marked “more than € 5, up to € 10”. One marked “more than € 10”.

There were three “don’t know” and one missing. See table 47.

The cost paid by each participant varied. In four programmes a participation in the program was free. In one programme the participants’ proportion was 100 %. See table 48.

The transport was not provided except in two programmes (question 61). One of these two programmes provided transport to everyone; the other one did it selectively. See table 49

Responses to question 62 and 64 concerning the proportions of the cost of refreshment and transport paid by each participant, see table 50.

▪ **Publicity, marketing and promotion**

The most common methods used to publicise, market or promote the programmes were features in local newspaper, talk to local groups, word of mouth and website. (Question 65).

Many of the programmes had used multiple methods to publicise, market or promoted their programmes. One used total of 16 methods.

There was four Programmes Directors who specified other methods such as “contact via home nurses and doctors”, “direct approaching possible participants”, “sending information directly to all municipalities in Denmark” and at least that the activities “were according to law so the participant were advised by health professionals”. Moreover answers, see table 51.

According to question 66 to of the programmes had found it useful to capitalise on national or regional campaigns. One of them found it useful to the national campaign “Walk for live” and some regional campaigns too. The other programme found it useful to capitalise on a local health arrangement.

To of the Programme Director had not tried to capitalise on national or regional campaigns related to aspects of ageing and health in order to improve recruitment of new participants and/or motivations of existing participants and tree answered that they did not found it useful to this purpose. See table 52.

Four out of seven programmes found the programme useful to build partnerships. They gave examples as “partnerships to physiotherapists”, “partnerships to doctors” and the “municipal social department”.

Two of the Programmes Director did not found it useful to build partnerships and one programme had not tried. See table 52.

	PA Programme Director											
	A	B	C	D	E	F	G	H	I	J	K	Total
Medicine												
Other Health Profession	x			x	x	x	X					
Exercise/ Sport Science	x	x										
Other			x									
Missing data												
Total												

Table 11 - Programme Questionnaire Question 4 (ProgQ4).

Educational backgrounds of PA Programme Directors selected by Danish national Experts

	Number
National	3
Regional	2
Limited to a city/town	2
Limited to a local neighbourhood	
Missing data	
Total	7

Table 12 (ProgQ9). PA Programme Directors' responses concerning the geographical classification of their programme.

	Number
Less than 1 year	
1 to 5 years	4
6 to 10 years	2
More than 10 years	1
Missing data	
Total	7

Table 13 (ProgQ10). PA Programme Directors' responses concerning the length of time their programme has existed.

	Number
Masters (elite competitor) programme	
Community based senior fitness programmes (groups)	1
Community based senior chair-based programmes	
Home based exercise programmes (individual)	
Exercise referral / General Practitioner referral programmes	1
Falls Prevention Programmes	
Medical condition-specific programmes	1
Cardiac rehabilitation	1
Pulmonary rehabilitation	1
Arthritis programmes	1
Other medical condition-specific programmes	1
Other programmes	

Table 14 (ProgQ11). PA Programme Directors' responses concerning which component programmes are included in their overall programmes.

	Number
Group activity	7
Individual activity	4
Indoors	6
Outdoors	4
Water-based	2
Land-based	7

Table 15 (ProgQ12). PA Programme Directors' responses concerning the description of their overall programmes.

	Number
Sport / physical recreation facility	2
Community centre	1
Day resources centre	0
Participant's private dwelling	5
Sheltered housing, assisted living facility, care home or nursing home	4
Other	1

Table 16 (ProgQ13). Programme Directors' responses concerning the types of facilities used by their overall programmes.

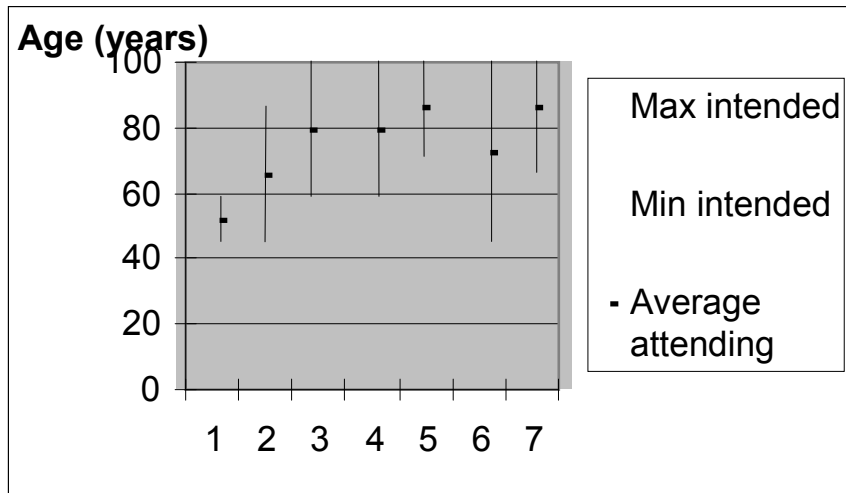


Figure 1 (ProgQ14-15). PA Programme Directors' responses concerning the age groups for whom their overall programme is intended and the average age of participant actually attending a typical session of the programme

	Number
Community- dwelling older adults	4
Institution – dwelling older adults	
Both, together (in the same group)	1
Both separately (in different groups)	2
Total	7

Table 17 (ProgQ16). PA Programme Directors’ responses concerning the ‘category’ of participant (by type of dwelling) for whom their overall programme is intended.

	Number
Frequently walks vigorously or runs	
Walking outdoors with no walking aids and no assistance or supervision by another person	5
Walks outdoors with a walking aid but no assistance or supervision by another person	7
Walks outdoors only with assistance or supervision by another person	3
Never walks outdoors	3

Table 18 (ProgQ17). PA Programme Directors’ responses concerning the ‘category’ of participant (by level of functional mobility) for whom their overall programme is intended.

	Number
0%	
25%	
50%	
75%	6
100%	1
Don't know	
Total	7

Table 19 (ProgQ18). PA Programme Directors' estimates of the proportion of participants in their overall programme that are women.

	Number
1	3
2 – 5	2
6 – 10	3
11 – 15	4
16 – 20	0
21 – 25	1
26 – 50	0
51+	0
Don't know	

Table 20 (ProgQ19). PA Programme Directors' estimates of 'group' sizes used in their overall programmes

	Number
1 : 1	1
1 : 2 - 10	2
1 : 11 - 25	2
1 : 26 - 50	
1 : 51+	
Don't know	
Total	5

Table 21 (ProgQ20). PA Programme Directors' estimates of the ratio of instructors to participants in a typical session of their programme

	Maximum	Usual
<1		
1	2	2
2	1	4
3 – 4	2	1
5 – 7	1	
8+	1	
Don't know		
Total	7	

Table 22 (ProgQ21-22). PA Programme Directors' estimates of the maximum possible frequency and the usual frequency with which individuals participate in their overall programme

	Number
0%	
25%	2
50%	2
75%	1
100%	1
Don't know	1
Total	7

Table 23 (ProgQ23). PA Programme Directors' estimates of the proportion of current participants that have attended their overall programme for at least a year

	Number
Health promotion	
Improved competitive performance	
Disease prevention	4
Improved physical function	3 (3)
Improved mood	(2)
Opportunities to socialise	(2)
Improved self esteem / confidence	
Other	
Don't know	
Total	

Table 24 (ProgQ24). PA Programme Directors' responses concerning the two most important overall aims of their programme, from the point of view of its sponsoring organisation

	Number
Not at all	1
1 – 2	3
3 – 6	2
More than 6	
Don't know	1 (missing)
Total	7

Table 25 (ProgQ25). PA Programme Directors' estimates of the frequency (times per year) with which the satisfaction of participants in their programme is formally measured

	survey of aims	prog. adjusted for aims	outcomes measured
Yes			7
No			
Don't know	7 (missing)	7 (missing)	
Total	7	7	7

Table 26 (ProgQ26-28). PA Programme Directors' responses concerning whether (A) participants are formally surveyed for the aims of their involvement in the programme, (B) programmes are adjusted according to participants' aims, and (C) objective outcome measures are recorded for participants at regular intervals

	Number
Strength or explosive power	6
Maximal oxygen uptake (directly measured)	0
Sub maximal test of aerobic fitness	1
Balance	6
Joint range of motion	3
Body composition	3
Bone density	0
Mood / depression	3
Social support	0
Other	2
Not applicable	

Table 27 (ProgQ29). PA Programme Directors' responses concerning which objective measures are recorded at regular intervals

	Number
Yes	3
No	
Don't know	
Total	3

Table 28 (ProgQ30). PA Programme Directors' responses concerning whether eligibility for entry to their programme requires the potential participant to have a health check

	Number
Completion of a health screening tool	
Assessment by a doctor	2
Assessment by a doctor who is a sports medicine specialist or by the programme doctor	
Assessment by some other healthcare professional	
Other	1
Total	3

Table 29 (ProgQ31). PA Programme Directors' responses concerning the form of health check required for a potential participant to be eligible for entry to their programme

	Number
Yes	2
No	4
Don't know	1
Total	7

Table 30 (ProgQ32). PA Programme Directors' responses concerning whether eligibility for entry to their programme requires completion of a health screening tool by the potential participant.

	Internationally recognised	Adapted for the prog.
Yes	1	2
No	1	
Not applicable	5	5
Total	7	7

Table 31 (ProgQ33 & 35). PA Programme Directors' responses concerning whether their health screening tool is internationally recognised and whether it had been adapted for their programme

	Dizziness	Eyesight	Hearing	Don't know	Not applicable
Yes					7
No					
Total					7

Table 32 (ProgQ36). PA Programme Directors' responses concerning the questions included in the health screening tool used by their programme

	Number
The applicant need only sign a liability waiver	
Applicant must obtain ‘approval’ from any healthcare professional	
Applicant must obtain ‘approval’ from their doctor	3
Applicant must obtain ‘approval’ from a doctor who is a sports medicine specialist or from the programme doctor	
It is not possible for the applicant to be permitted to enter the programme	
Other	1
Don’t know	
Not applicable	
Total	4

Table 33 (ProgQ37). PA Programme Directors’ responses concerning what is done so that an applicant can be permitted to enter a programme after a potential problem has been identified by the health screening tool

	As in response to ...	Number
Strength	ProgQ40	5
Explosive power	ProgQ40	4
Endurance	ProgQ38	(3)
Coordination – Balance	ProgQ38	(6)
Joint range of motion	ProgQ40	3
Body composition	ProgQ40	2
Bone density	ProgQ40	2
Other	ProgQ40	0

Table 34 (ProgQ38 & 40). PA Programme Directors' responses concerning the component(s) or aspect(s) of physical fitness which their PA Programme aims to improve

TABLE 35 (ProgQ39)

	Number
Aquatics	
Swimming	0
Aqua exercises	2
Cycling	
On Road/ Paths	0
Off Road/ Track/ Hills	0
Group Sports/ Ball Games	
Badminton	0
Billiard Sports	0
Boules	0
Bowling	0
Golf	0
Minigolf	0
Short tennis	0
Tennis	0
Recreational Movement	
Dance	1
Movement to exercise	0
Exercise to music	3
Derived from Pilates	1
Derived from Tai Chi	1
Derived from Qigong	0
Derived from Yoga	0
Running	
Indoor running (not on treadmill)	0
Outdoor running/ Track	0
Orienteering	0
Skiing	
Cross Country Skiing	0
Downhill (Alpine Skiing)	0
Ski Touring	0
Walking	
Indoor Walking (not on treadmill)	4
Outdoor Walking on path/ track	0
Outdoor Walking groups	2
Rambling or Hill Walking	1
Trekking	0
Nordic Walking	0

TABLE 35 (continued)

Machine based equipment	
Circuits	3
Treadmill	0
Cycle	3
Rowing	0
Stepper	0
Cross – trainer	0
Cable machines/ fixed resistance	4
Dumbbells / Free weights	4
Physioballs (Swiss balls/ exercise balls) for balance	2
Resistance balls/ bands/ tubes	4
Balance disks/ wobbleboards	3
Other	
Competitive sport	
Adapted exercise	
Back pain prevention	0
Osteoporosis prevention	0
Falls prevention	0
Pelvis Floor exercise	0
Chair-based exercise	5
Pulmonary rehab	0
Other	

Table 35 (ProgQ39). PA Programme Directors’ responses concerning the modalities of physical activity offered in their programme.

NB:

In the table” Cardio rehab” is missing. In our data “Cardio Rehab” is marked 0. Bibi Gram

	Number
Never	1
For the first few weeks only	1
For the first few months only	2
Always	3
Don't know	
Total	7

Table 36 (ProgQ41). PA Programme Directors' responses concerning the extent to which 'progression' of participants is part of their overall programme.

(‘Progression’ defined as a systematic increase in the intensity or resistance, the frequency and/or duration of exercise.)

	Warm up	Cool down
0 minutes	2	1
1 – 5 minutes		3
6 – 10 minutes	1	1
11 – 15 minutes	2	1
16 – 20 minutes	2	1
Don't know		
Total	7	7

Table 37 (ProgQ42-43). PA Programme Directors' estimates of the length of a usual warm up at the beginning of a session in this programme and of the length of a usual cool down (or 'wind down' or 'warm down') at the end of a session

	Number
0 minutes	
10 minutes	
20 minutes	
30 minutes	2
40 minutes	
50 minutes	
60 minutes	3
More than 60 minutes	2
Don't know	
Total	7

Table 38 (ProgQ44). PA Programme Directors' estimates of the length of a usual workout component of a session in this programme

	Number
This is not possible	
Adapted exercise, with participants in disease-related groups	3
Adapted exercise, with participants in frailty-related or disability-related groups	1
Adapted exercise, with participants included in the mainstream older person's group(s)	3
Don't know	
Total	7

Table 39 (ProgQ 45). PA Programme Directors' responses concerning how, within this programme, they cater for the exercise needs of older people with chronic medical conditions.

	Number
A basic (entry level) qualification	0
A higher level (old age specific) qualification	0
Other	
Don't know	

Table 40 (ProgQ46). PA Programme Directors' responses concerning minimum level of qualification required for instructors delivering this programme to older participants

	Entry level qualification	Higher level qualification
0%		
25%		
50%		
75%		
100%		
Don't know	7	7
Total		

Table 41 (ProgQ48 & ProgQ49). PA Programme Directors' estimates of the proportion of instructors guiding/ supervising older participants, in this programme, that have the entry level qualification or the higher level qualification.

	Number
Yes	1
No	4
Don't know	2 (missing)
Total	7 (or 5?)

Table 42 (ProgQ.47). PA Programme Directors' responses concerning whether instructors for this programme have to be a member of a professional register

	Number
0	
1	1
3	1
5	2
10	
15	
20	
30	
More than 30	
Don't know	
Not applicable	3
Total	7

Table 43 (ProgQ51). PA Programme Directors' estimates of the number of hours in-service training provided each year for the instructors in this programme

	Number
Not at all	3
Instruction	1
Instructor's assistant	0
'Buddying' a participant	2
Peer mentoring participants	1
Administration	1
Transport	0
Refreshments	3
Other	1
Don't know	
Not applicable	

Table 44 (ProgQ54). PA Programme Directors' responses concerning ways that unpaid volunteers contribute to this programme.

	Emergency protocols	Equipment protocols
Yes	2	2
No	5	5
Don't know		
Total	7	7

Table 45 (ProgQ55 and 57). PA Programme Directors' responses concerning whether this programme has specific protocols to be followed in emergency situations or in respect of the use, storage and maintenance of equipment

	Emergency protocols	Equipment protocols
3 monthly		
6 monthly		
Annually		
Never		
Don't know	2 (missing)	2 (missing)
Not applicable	5	5
Total	7 (or 5?)	7 (or 5?)

Table 46 (ProgQ56 and 58). PA Programme Directors' responses concerning the frequency of staff training in the protocols to be followed in emergency situations or in respect of the use, storage and maintenance of equipment

	Number
Up to € 2	
More than € 2, up to € 5	
More than € 5, up to € 10	2
More than € 10	1
Don't know	3
Total	6

Table 47 (ProgQ59). PA Programme Directors' estimates of the total cost (per participant per session) of providing their programme (excluding transport and refreshments but including the cost of the room, lighting, heating, maintenance, instructor's fee, administration)

	Number
0%	4
5%	1
10%	
25%	1
50%	
75%	
100%	1
Don't know	
Total	7

Table 48 (ProgQ 60). PA Programme Directors' estimates of the proportion of cost paid by each participant in their programme

	Transport	Refreshments
Yes, to everyone	1	6
Yes, selectively	1*	**
No	5	
Don't know		1 (missing)
Total	7	6 (or 7?)

*some participants, some sessions

**some sessions

Table 49 (ProgQ61 and 63). PA Programme Directors' responses concerning whether transport and refreshments are provided for participants in their programme

	Transport	Refreshments
0%	1	3
5%	1	
10%		
25%		
50%		
75%		
100%	5	1
Don't know		2
Total	7	6

Table 50 (ProgQ62 and 64). PA Programme Directors' estimates of the proportion of the cost of transport and of refreshments that is paid by each participant in their programme.

	Number	%
Advertising in local newspapers	3	43%
Advertising in national/ regional newspapers	1	14%
Advertising in elder-oriented magazines		
Advertising through elder-oriented organisations		
Features in local newspapers	4	57%
Features in national/ regional newspapers	1	14%
Features in elder-oriented magazines	1	14%
Advertising on local radio	1	14%
Advertising on national/ regional radio	1	14%
Advertising on local TV	1	14%
Advertising on national/ regional TV		
Features on local radio	2	29%
Features on national/ regional TV	1	14%
Features on local TV		
Features on national/ regional TV		
Neighbourhood leafleting	2	29%
Sports hall leafleting	2	29%
Health premises leafleting	1	14%
Leafleting in community centres for older people	2	29%
Talks to local groups	4	57%
Word of mouth	5	71%
Websites	4	57%
Open days	2	29%
Bring a friend	2	29%
Discounts		
Multiple session bookings		
Other	4	71%

Table 51 (ProgQ65). PA Programme Directors' responses concerning the methods which have been used to publicise, market or promote their programme.

	(1)	(2)
Yes	2	4
No	3	2
Have not tried	2	1
Don't know		
Total	7	7

Table 52 (ProgQ66 and 67). PA Programme Directors' responses concerning whether their programme had found it useful (1) to capitalise on national or regional campaigns related to aspects of ageing and health in order to improve recruitment of new participants and/or motivation of existing participants, and/or (2) to build partnerships with local healthcare professionals or organisations.

SYSTEMATIC SEARCH FOR EVIDENCE BASED GUIDELINES

The objective was to conduct a logical, repeatable and thorough search for evidence-based, professional guidelines for the promotion and/or provision of safe and effective physical activity (PA) by older people.

The guidelines identified by the search are to be used to create a readily accessible inventory of existing evidence based guidelines. This resource is to be included in the cross-national and national reports on WP5. It will permit a critical comparison of the successful PA programmes and PA promotion strategies (identified by the WP5 Experts) with current evidence-based guidelines

○ **Methods**

Definitions

Physical activity (PA) – Any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure *e.g.* running, walking, swimming, lifting or carrying a heavy weight.

PA promotion strategy – An intervention, device or plan which it is intended will increase the PA of a community.
e.g. Improved street lighting or an educational TV advertising campaign.

Older person - In this systematic search the older person was defined as being 60 years and over, in good health or suffering from a medical condition.

Criteria for inclusion in inventory of guidelines

The publications to be included in the inventory were those which we considered to be guidelines, position stands, consensus statements, standards or recommendations from a credible source, that addressed exercise and/ or physical activity for older people and which satisfied all five of the following criteria.

- composed by a process involving a consensus of experts, and
- published under the auspices of government departments, international health organisations, age-related NGOs, or learned societies, and
- with sufficient information about the evidence on which they are based to allow the individual recommendations to be graded according to the strength of that evidence (see ‘Key to evidence

statements and grades of recommendation', as published in the most recent SIGN guideline, viz. SIGN Guideline No. 98, July 2007), and

- published from 1990 onwards, and
- addresses the delivery and/or promotion of physical activity for the older person (including old age specific sub-sections of guidelines for the role of physical activity for adults of all ages in health and/or disease).

Search to identify candidate publications for inclusion in the inventory of guidelines

The search protocol took account of the fact that the guidelines which we sought might have been published in scientific journals, websites, or as free-standing publications.

We searched the following electronic databases:

Ovid Medline (1950 to June Wk 4 2007)

CINAHL (1982 to June Wk 5 2007)

EMBASE (1996 to 2007 Wk 26)

SPORTDiscus (1830 to May 2007)

AARP Ageline (1978 to June 2007)

Cochrane Review Library

Searches included no language restrictions and were limited to older adults.

The following two search strategies were used for Ovid Medline and adapted for the other databases.

Search 1 – Provision of physical activity for older people

- 1 exp exercise/
- 2 (exercise\$ or physical activity or exercise prescription).mp
- 3 1 or 2
- 4 exp aged/ or exp "aged, 80 and over"/
- 5 (aged or elderly or senior\$ or older adult or older person\$ or older people).mp
- 6 4 or 5
- 7 guideline.pt
- 8 practice guideline.pt

- 9 exp guidelines/
- 10 exp health planning guidelines/
- 11 7 or 8 or 9 or 10
- 12 exp consensus/
- 13 (guideline\$ or consensus or position stand or standard\$ or recommendations\$).ti
- 14 11 or 12 or 13
- 15 3 and 6 and 14

Search 2 – Promotion of physical activity for older people

- 1 exp exercise/
- 2 (exercise\$ or physical activity).mp
- 3 1 or 2
- 4 exp health promotion/
- 5 (health promotion\$ or promotion strategy or promotion strategies or health behaviour\$ or campaign\$).mp
- 6 4 or 5
- 7 exp aged/ or exp "aged, 80 and over"/
- 8 (aged or elderly or senior\$ or older person\$ or older people or older adult\$).mp
- 9 7 or 8
- 10 guideline.pt
- 11 practice guideline.pt
- 12 exp guidelines/ (61574)
- 13 exp health planning guidelines/
- 14 exp consensus/
- 15 (guideline\$ or consensus or position stand or recommendation\$ or standard\$).ti
- 16 10 or 11 or 12 or 13 or 14 or 15
- 17 3 and 6 and 9 and 16

The following websites were chosen on our judgement and searched for relevant guidelines, position stands, consensus statements, standards or recommendations. Search terms were adapted from the two Ovid Medline searches outlined above.

WHO (World Health Organisation)
 NIH (National Institute of Health)
 NIA (National Institute of Ageing)
 CDC (Centre for Disease Control)
 ACSM (American College of Sports Medicine)
 AHA (American Heart Association)
 NICE (National Institute for Health and Clinical Excellence)

Scrutiny to select publications for inclusion in the inventory of guidelines

Two reviewers (FS, AY) independently scanned the titles of candidate publications identified by the searches to identify potentially relevant publications for more detailed review. Searches of bibliographies and texts were also conducted to identify additional relevant publications. Non-concordance of reviewers was resolved by discussion. The abstract was obtained for each title selected.

The abstracts were then independently studied by the two reviewers, to identify publications for full review. Non-concordance was resolved by discussion. From the full text, the reviewers independently identified the publications which met all five criteria for inclusion in the inventory. Once again, non-concordance was resolved by discussion.

○ Results

Approximately 5120 titles were considered. Of these, over 650 abstracts were reviewed and, from them, 325 full publications were reviewed. Fifty-five publications met all 5 criteria for inclusion in the inventory, where they have been listed under the following subheadings: habitual physical activity and PA promotion, resistance training, exercise referral, cardiovascular conditions, exercise testing and screening, hypertension, stroke, hypercholesterolemia, diabetes, obesity, osteoporosis, falls, osteoarthritis and chronic pain (1).

(1) **Please note:** The number of guidelines included may yet increase slightly as we receive publications. We will inform you if this happens.

▪ CONCORDANCE OF PROGRAMMES WITH GUIDELINES

○ Discussion

The scientific evidence of coherence between physical inactive lifestyle and chronic- and lifestyle-related disease is well documented and physical activity is an important factor in public health and prevents development of chronic disease as cardiovascular disease, type 2 diabetes and osteoporosis (1,2,3).

It is well known and evidence based that physical activity is often associated with improvements in functional ability and health status. There are numerous benefits of physical activity, physiological, psychological, social and long terms effects (4). It have made the WHO and health authorities in many countries, including the Danish health authorities, to recommend physical activity to improve overall physical and psychological health, to prevent loss of functional ability and to prevent and to treat

chronic diseases. The general recommendation for adults is 30 minutes physical activity per day (5, 6).

At the present Danish Guidelines for Physical activity specific among older people does not exist. But in fact, a task group in cooperation with The National Board of Health is working on publication concerning physical activity and physical activity programmes and old people. The aim is, for one thing, to communicate the scientific evidence concerning physical activity and old people and to give recommendation to the municipality about physical activity, training and old people. This is important because in Denmark there have been some reorganisation in the health system concerning the responsibility for training and rehabilitation. Now it is municipal task. Publishing and develop a evidence based protocols to aid health care providers and physical activity specialists in appropriately and efficiently assessing older adults in order to triage them to most appropriate physical activity intervention program is actually recommended (10).

In Denmark there are an old tradition for well-developed network and unions who have many options and opportunities to drive physical activity and sport. Gradually, specific for old people with chronic disease as well.

These unions and sports clubs are partially subsidized from the Government.

The Danish data material in this report does not allow general consideration or conclusions. Reasons have been explained. Some of the answers gave the impression that there were some linguistic misunderstandings.

It is my impression that the standard of the physical activity programmes for old people in Denmark are high and so are the instructor's educational level. The report, in the light on the flimsy material, does not support this statement.

In the light of the fact, that the procedure selecting the PA Experts failed, PA Experts and Programme Directors who contribute and constitute the basis for this rapport are not wide represented. This does lead to some coincident and consistent answers.

Unfortunately, the part of the WP5 concerning Promotion is not included the data material. Reasons for this have been explained earlier.

Methodical problems are the weak point in this report as this has prompted insufficient number of PA Experts and not clear boundaries between PA Experts and PA Programme Directors. On the other hand Denmark is a small country were supplies of different form for positions in the area of physical activity and old people are limited.

The frame of the programs

All the programmes in this rapport were land-based *group activities* and the functional level of the participants were as minimum, corresponding walking outside with walking aid but no assistants from another person. Cress ME at all (7) accentuate in "Physical Activity Programs and Behaviour Counselling in older Adult Populations" that group based activity is a very good way starting a physical activity program.

In some of the programs the participant had possibilities for individual training. These programmes also had a widened functional level of the participants.

In the Danish programs it varied how many times a week the participants had an opportunity to participate the program. For two programs (28%) it was only once a week.

The recommendations are that older adults should perform moderate-intensity aerobic (endurance) physical activity for at minimum of 30 min on five each days or vigorous-intensity aerobic activity for at minimum 20 min on three days each week (8). Although it is not possible to conclude how physical active the participants are besides the present programs and the intensity in the programs was not specified, it is clear that once a week is not meeting the recommendations. The remaining five programs (72 %) did all give the participants an opportunity to participate the program 2 times a week or more.

Only two programmes (28 %) had a specific emergency or an equipment protocols. Taking into a count that most of the programmes were on national or regional level this outcome is puzzles. It is a clear advice that every community setting that offers opportunities for physical activity should be able to handle, in the evident of emergency (7).

Four out of seven Danish programs (57 %) had ongoing in-service training for the instructors and two of these mentioned “First Aid” as an example of topic. In the “Physical Activity Programs and Behaviour Counselling in Older Adult populations” it is accentuate that when ever possible the staff should be trained in CPR and first aid (7).

Content of the programs

The two most overall aim(s) of the Danish programs was improved physical function and disease prevention. Four programs had “improved mood” and “opportunity to socialise” mentioned as second answer.

Strength Activities

Strength activities are assessed to one of the key components of physical activity programs for older adults and are highly recommended (7,8, 9). Four of the Danish programs (57 %) had markedly strength exercise as offered in their programs. It is also recommended that the resistance training program should include free-weight and machine exercise and four of the Danish programs (57 %) met this recommendation (9).

Unfortunately, the answers do not allow saying anything about whether the intensity of the activity is following the recommendations. But six out of seven programs (86 %) did have strength as an objective outcome measure, which was included at regular intervals during the program. The measurement instruments were not stated. Furthermore, it is not possible to asses, whether activities as “Circuits”, “Aqua exercises” and “Exercise to music” contains strength activities.

Endurance activities

Only 3 Danish programs (43 %) had markedly endurance activities as treadmill, cycle, rowing etc., but others modalities might very well have an effect on the aerobic capacity. For example the Nordic Walking program. Four programs (57 %) had indoor walking as a part of the program and indoor walking can, depended on the intensity, improve or maintain the aerobic capacity.

It is not wide of the mark, assessing that minimum four of the Danish programs (57 %) did prioritise endurance activities as recommended (7,8,9). The recommendations are moderate-intensity aerobic physical activity for a minimum 30 min on five days each week (8) or 20 min of vigorous-intensity physical activity on three days each week or a combination of moderate-and vigorous intensity activity in the range of 450 to 750 MET· min ·week (6,7,8).

Flexibility Activities

Flexibility activities increase the length of the muscle beyond that which usually is needed in normal daily activity but these flexibility exercises are necessary to maintain flexibility for regular physical activity and daily life. The recommendation for flexibility activity is, that these exercise should be performed a minimum 2 a week for at least 10 min each day (7,8).

Several of the modalities of physical activities mentioned in the questionnaires could have an effect on greater range of motion around the joint. These exercises are often incorporated in modalities as “Exercise to music”, “Pilates”, “Yoga” and “Dance”, and can furthermore be a part of “warm up” and “cool dawn”.

There were not evident uses of flexibility activities in the Danish programs. However three of the programs (43 %) did have flexibility as their objective outcome measurement.

Six of the programs (86 %) did have a “warm-up” as a part of the program and five of them (71 %) for more than 6 minutes. The same six programs also had a “cool down” as a part of the program.

Balance activities

Specific balance activities can have beneficial effect on the balance but exercises, as strength- and endurance exercises might as well improve the balance (7). A good balance is, especially in the elderly were the consequences of a fall can be extensive, a prerequisite for many daily activities.

Only four Danish programs (57 %) had specific balance exercises in their programs. On the other hand, two programs that did not mark “balance exercise” did have a big priority on strength activities.

Most of the programs (3 out of four) who had specific balance exercises did also give the participants opportunity to participate the program 2 times a week or more. So did the two programs with emphasis on strength activities.

Furthermore, six of the programs (87 %) had balance as an objective outcome measure.

Concerning Balance activities, the majority of the Danish programs did meet the recommendation for these activities.

Other things

Progression is an essential part of a physical activity program, and with a regular performance feedback the likelihood of maintenance the activity increases (7).

All, except one, of the Danish program did have “progression of the participants” as a part of the overall program. For 3 programs (43 %), progression always was a part of the program.

It is accentuate that accurate performance feedback can assist older adults in developing realistic expectation of their own progress (7) and health professionals should broaden their advice to the older adults and patients beyond the traditional prescriptive program (6). For promoting physical activity this also is important. Unfortunately, questions concerning this issue were not in the questionnaire. Neither was the issue “Activity plan”. Construct an activity plan for obtaining sufficient physical activity that addresses each recommended type of activity to the older adults, is indeed recommended (8).

In all of the programmes the majority of participants were women. Many of the programmes made a point of training strength and explosive power and balance. These activities are mentioned as key components of physical activity programs for older adults (7).

▪ **CONCLUSIONS & RECOMMENDATIONS**

I do mean the content of this report is too flimsy to make some seriously recommendation on basis of the report. A critical point here is also the lack of the part concerning promotion.

Emphasising the four key components Strength –, endurance - , flexibility-, and balance activities the Danish programs, to a certain extent, do meet the recommendation. Most of the programs prioritise activities which contain these activities and within the recommended frames.

Unfortunately this statement has a good deal of limitations as the data do not give any information about the intensity of the physical activity.

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▪ **ACKNOWLEDGMENTS**

▪ **APPENDIX ONE - IDENTIFICATION DETAILS OF NATIONAL PA EXPERTS**

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▪ **APPENDIX TWO - IDENTIFICATION DETAILS OF 'SUCCESSFUL' PA PROGRAMMES**

- **Exercise on prescription (MPR)**
 Søndersø Fysioterapi and Region Syddanmark (Region of South Denmark) www.fysio-klinik.dk/soendersoe
 Instructor in the project "motion as medicine" Claus Sevel
 Søndersø Fysioterapi I/S, Toftekær 7, 5471 Søndersø, Denmark.
fysio@saknet.dk

- **Nordic Walking**
 Danmarks idræts forbund/National Olympic committee and sport federation in Denmark. www.dif.dk
 Health adviser Henriette Boye Kyhl
 House of Sport, 2605 Brøndby, Denmark
Hbk@dif.dk

- **Boost the body, make everyday easier,- it is never to late.**
 ÆldreForum /AgeForum. www.aeldreforum.dk
 Head of the secretary Lotte Philipson
 ÆldreForum. Skiphusvej 53,3 5000 Odense C
lp@aeldreforum.dk

- **Get going where you live - " new energy to senior live".**
 Name and home page of organisation
 Instructor Elisabeth Bentsen
 Kirkebakken 42, 4621 Gadstap, Denmark
beth@mail.dk

- **"Rely on sport" (Stol på idræt)**
 Esbjerg Kommune. www.esbjergkommune.dk
 Physiotherapist Stine Stausholm
 Ribegade 169A, 6700 Esbjerg.
stis@esbjergkommune.dk

- **Physical activity according to legislation, Servicelov § 86**
 Odense Kommune. www.odense.dk
 District leader Eva Hasselbalch
 OKA- Aktivitet og Træning. Ørbækvej 100, 5220 Odense Sø, Denmark.

ehas@odense.dk

- **Training to prevent further lose of function**
Esbjerg Commune. www.esbjergkommune.dk
Physiotherapist Stine Stausholm
Ribegade 169A, 6700 Esbjerg.
stis@esbjergkommune.dk

▪ **APPENDIX FOUR – CITATION DETAILS OF EVIDENCE BASED GUIDELINES**

- **Sub headings**
 - **Sub sub headings**
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