The self-expression, gentle exercise and music (SEGEM) group: a multi-disciplinary exercise program

Tara Crossman, Rosemary Brigden, Bloomfield Hospital, Orange

WHERE DO WE COME FROM AND WHAT DO WE DO

SEGEM is an exercise program for older adults, which we have designed to suit the needs of the older residents of Bloomfield Hospital. Bloomfield Hospital is located in Orange, in New South Wales and offers a service to clients of the Mental Health System. Bloomfield provides a variety of services including, acute, rehabilitation and psycho-geriatric. The clients attending the SEGEM group are part of the hospital’s long stay geriatric clients. The clients in the SEGEM group range in age between 57 and 87 with an average age of 70: all have mental health problems and a number have significant physical problems as well.

WHAT IS SEGEM AND WHY RUN IT

SEGEM stands for self-expression, gentle exercise and music.

The SEGEM group was started for a number of reasons. The literature has been emphasising the need for regular exercise by older adults and the need for exercise to reduce the risk of falls, maintain mobility and impact on a variety of physical conditions including arthritis. Many older people have chronic diseases and disabilities, yet all can benefit from appropriate activity. All barriers, both physical and psycho-social, need to be addressed when introducing older clients to exercise. (Cooper et al., 2001). Butler et al (1998) stated that “any time is the best time for a person of any age to start exercising.” They defined exercise as “movement- dancing, walking, lifting a weight, using the body.” Gregg et al (1998) talk about the role exercise plays in reducing fracture risk in older women. Mazzeo et al. (1998) discuss the fact that physical activity also decreases risk of osteoporosis and falls within the elderly population and state walking, yard work and climbing stairs are some of the types of exercise to recommend. Clarkson-Smith & Hartley (1989) found that older adults who exercised demonstrated improved score on “measures of reasoning, working memory and reaction time”.

There was no formal structured physical exercise program in place at Bloomfield hospital for the older residents and as part of their disability the clients lacked the initiative to exercise. As a result the majority of them were overweight, and many spent the greater part of their day watching television. The only exercise they did was to go to the table to eat and to go to the bathroom and bedroom.
Aims and objectives of SEGEM

The aims are:

- to improve and/or maintain individual client physical function
- to provide a regular weekly exercise program for our clients
- to do six-monthly assessments to monitor performance, and to pick up any changes in a client’s capabilities
- to show improvement in, or maintenance of, at least one assessment area.

These assessment areas will be discussed at length further on in this paper.

The objectives are:

- to maintain and improve mobility; maintenance of mobility being of prime importance
- to increase standing tolerance
- to maintain and improve flexibility, (obviously it is impossible for anyone to put on their footwear if they are unable to reach their toes.)
- to strengthen muscles
- to aid in the prevention of falls. This is an area of focus during the exercise component of the group.

The history

In 1999 Diversional Therapy identified the need for an exercise program for the older clients of Bloomfield. The idea of a regular exercise program was proposed and the idea was discussed with the Director of Nursing and various ward staff. Staff were invited to provide input into the concept and a number of ideas were discussed. The Diversional therapist attended a course in Gentle Exercise for the aged.

In 2000 the first group was run with 5 participants and was felt to be a tremendous success. The clients stated that they had thoroughly enjoyed themselves and asked for the group to continue. The group did continue and the number of clients regularly attending began to build. When the number of regular participants reached 14, the Diversional therapist requested and received further help from Occupational Therapy, Psychology and, when available, Nursing staff. The SEGEM group had become multi-disciplinary.

2001 saw the occupational therapy staff receive training and the Diversional therapist receive more advanced training. As a result of that training it was decided that the team should commence a formal assessment process. The tasks selected were in consultation with the physiotherapist who had provided the further training. By completing formal assessments, client’s progress would be able to be monitored and change pinpointed. The hospital’s physiotherapist joined the group and began to run the gentle exercise component of the program.
**SEGEM's costs**

The costs in commencing the SEGEM group included staff training, and equipment. The equipment comprised a portable stereo, with a variety of music, and a set of plastic cricket equipment, several different sized balls, and a set of skittles. The ongoing costs include the prizes. Chocolate frogs, marshmallows or diabetic sweets distributed to clients who have earned them, giving only the most suitable sweet to the client concerned. **Morning Tea** is given at the end of each group and consists of a drink of diabetic cordial and a biscuit. **Staffing** as always continues to be the most significant ongoing cost.

However, all in all SEGEM is cost and time effective, as high numbers of clients are seen at once, instead of small numbers or individuals. Client’s individual needs can be addressed as part of the exercise component and the clients try harder when they are up against each other.

**Format of the SEGEM group**

The idea of each activity and game is to encourage the client to exercise and at the same time not have them realise that they are exercising.

Every session starts with **ball skills**, which includes throwing and catching of small and large balls. This activity encourages the clients to extend and contract fingers; reach from side to side and move arms and shoulders.

Dancing follows this, it might be Rock and Roll, or Scottish reels, or it might be Ballroom dancing. Each dancing segment finishes with a Conga chain around the hall. This is an excellent way of improving mobility and walking tolerance whilst having fun. Clients are expected to participate in the Conga and self-propelling of wheelchairs and other mobility aids is also expected even if they only complete one lap of the hall. Clients with poor mobility often get up and dance and this is encouraged. When this occurs staff make sure, that anyone who is wobbly has a staff members firm hand on at least one side of them.

**Gentle exercises** run by the Physiotherapist follows this. The focus is falls prevention and flexibility, with exercises around centre of gravity and balance being undertaken.

Then the group moves into the games. First off, is the very popular **musical chairs**, this game is highly competitive, although, many of our male clients will give up the final chair to a lady. We run this in a large circle to encourage endurance with walking. Clients who are wheelchair dependent only have to grab the chair they do not have to transfer.

This is followed by the most popular activity **Cricket**, the clients are scored over four balls and the winner is the one with the highest score. There are set areas of the hall that are marked as 2, 4 or 6 runs and these marks are the same each week. The final activity is **skittles** or **quoits**. Clients have four balls or four rings and the highest score wins. If time permits then playoffs occur when tied scores occur in either cricket or skittles. Then to quiet down everyone the group concludes with **morning tea**.

In the excitement of competition with peers, it is amazing what can happen. Prior to the group one particular client was unable to self propel his wheelchair in the ward.
After being at the SEGEM Group he plays Musical Chairs taking himself around the hall at no lesser speed than the other players

**Documentation**

For the SEGEM group there is a variety of documentation that is recorded and is used to contribute to the outcomes of the group and to provide feedback to the ward and medical staff involved with the client attending the group.

An attendance list is completed during each group, and from this an individual client’s attendance can be followed for the entire year. For example in 2001, 9 clients out of an average of 18 attended more than 30 out of a possible 36 groups and at the same time clients who are not attending can also be identified.

Each a week client’s participation in the gentle exercises, and their individual scores for cricket, skittles and or quoits is recorded for comparison of performance level. In addition to this the client’s attendance and general performance are recorded in their medical record. These results are also discussed informally with the nursing staff and formally as part of the case review process with the treating medical staff.

The six-monthly assessment results are recorded and compared and twice yearly a colourful and fact filled newsletter is sent out to each ward across the hospital that has clients involved in SEGEM.

**ASSESSMENT AND RESULTS**

To be able to draw conclusions about the usefulness of SEGEM and the impact it is having on clients, information is taken from three areas and this is then analysed.

- **Attendance** — average attendance across the year and across each month is recorded.
- **Individual performance** — the individual client’s scores at cricket, skittles and quoits are recorded and a random series of groups is compared to identify patterns or changes in skill level.
- **Formal assessment** — the three tasks chosen were felt to best suit measuring our goals. Clients have a staff member beside them throughout the assessment process to support and to count and record the results, as clients found it impossible to complete the task and count at the same time.
  - **Sit to Stand**: how many times a client can go from sitting to standing and return to sitting in the space of 1 minute. The client must straighten their knees for a full stand to be counted.
  - **Catch and Throw**: how many times a client can throw and catch a ball from a staff member standing 1m away. 1 point is given for a complete catch and return to the staff member.
  - **20m Walk**: How long it takes for the client to walk or self propel their wheelchair the length of the hall. A staff member walks alongside the client throughout the task.
Attendance

The average attendance per group over the years of the SEGEM group is shown below.

Figure 1  Average attendance per group, 2000 to 2002

Each year the average monthly attendance has dropped during the winter months due to the extreme weather conditions in Orange including snow.

Formal assessment

At the third formal reassessment there was a total of 10 clients being assessed for the third time and 4 clients being assessed for the second time. Each clients score is compared against their score for the previous assessment and the trend of changes is considered. Each task is looked at and then the percentage of clients who meet the goal of maintenance or improvement in at least one area are identified and graphed.
In the area of sit to stand 79% of clients demonstrated improvement, the maximum improvement being 8. 14% demonstrated a decrease in their score, the maximum decrease being 4 and 7% remained the same. When scores were compared across all three assessments, 60% of clients demonstrated an improvement at each assessment; 10% improved at the second assessment and remained the same on the third assessment. 20% showed a decrease at second assessment but improved at third assessment; and 10% improved at second assessment and did not improve at the third assessment.
Catch and throw saw 79% of clients improve, with the largest improvement being an increase of 15, and 21% showed a decrease in their total, the greatest decrease being 19. The client who scored the greatest decline only completed half the time and then refused to continue with the task. When scores were compared across all three assessments 50% of clients demonstrated an improvement at each assessment; 10% remained the same at the second assessment and decreased on the third assessment; 20% showed a decrease at second assessment but improved at third assessment. 10% improved at second assessment and did not improve at the third assessment; and 10% of clients decreased in this task over all three assessments.
In this category 28.5% of clients demonstrated improved times, the greatest reduction being 12 seconds, 28.5% remained the same and 43% had their time increase, the maximum increase in time was 40 seconds. It is important to note that of the two clients whose performance significantly declined, i.e. their times increased over 20 seconds, had both been mentally unwell for a period of time prior to the assessment, and as a result had increased medication, that in turn affected their mobility. It is also important to note that both clients improved in the other two tasks. When scores were compared across all three assessments 10% of clients demonstrated an improvement at each assessment. 40% improved at second assessment and remained the same at the third assessment, 10% were the same at second assessment and did not improve at the third assessment and 10% showed a decrease at second assessment however improved at third assessment. 10% improved at second assessment and did not improve at the third assessment and 10% of clients decreased in this task over all three assessments.

One of the goals of the SEGEM group was that clients would improve or maintain their scores in a minimum of one assessment area. With this goal in mind 100% of clients improved in a minimum of one assessment category. After the second assessment 70% of clients improved in two or more categories and 30% improved in only one category. When comparing the second assessment to the third assessment 81% of clients recorded improvements or maintenance in 2 or more categories and the remaining 19% improved in only one category.

When considering all three assessments one client (10%) improved in all three categories in each assessment, five (50%) recorded improvements in two categories at each assessment, three (30%) recorded a series of improvements in only one category. One client did not show a consistent change across the three assessments; however, she is the oldest member of the group at 87 and has difficulties comprehending
instructions. This client only improved in one assessment area at the second assessment, at the third assessment the two areas she had performed poorly in at second assessment improved and her walk declined.

**Where do we go from here**

It is well known that exercise needs to be more frequent than once a week. The option of running twice weekly ward based short exercise programs is currently being discussed. Another advantage of ward-based groups would be that those who do not come to the hall could be accessed and encouraged to exercise.

The treating psycho geriatrician has commenced prescribing attendance at SEGEM as part of a client’s treatment plan and this exercise prescription is being encouraged to others on the medical staff.

The formal assessment process needs to continue to monitor client’s ongoing changes. There is also the need to develop a screening tool for when clients join the group for the first time to gain baseline information prior to their participation in a formal review.

**CONCLUSION**

SEGEM has continued to be popular with many clients regularly attending the group despite Orange winters. There has to be something in it that the clients enjoy as they continue to come and anyone who has ever worked with clients who have a mental illness know that if they do not like it they will not come to activities, even if they are strongly encouraged.

The client’s improvements have been above expectation, with many of them maintaining or improving in more than one category of the assessment process.

The SEGEM group is cost effective, with multiple clients being seen at once. It encourages not only exercise but also self-esteem and social skills, and is transferability. It is able to be performed anywhere there is some space and electricity is available. It can be easily taken into the community and run in a nursing home, hostel or local community hall as long as there is access to some basic equipment and trained staff.

The results so far have been positive and when a client tells you they can now walk further and enjoy outings without becoming tired, then surely the SEGEM group is a positive and useful group. This group contributes to a client’s physical and mental health as well as their quality of life.
REFERENCES


PRESENTERS

Tara Crossman was the Senior Occupational Therapist at Bloomfield hospital for 6½ years. During that time she worked across the hospital, providing functional assessments, and group and individual activities for clients. Tara has since moved to South Australia and continues to work within the area of mental health.

Rosemary Brigden is the Diversional Therapist at Bloomfield Hospital. She works across the hospital providing groups, individual sessions and outings for all. Rosemary has worked at Bloomfield for about 7 years and has ensured the growth and development of the role of the DT in that time.