OXFORD
INTERNATIONAL
AQA EXAMINATIONS

2018/19 CANDIDATE RECORD FORM, PRODUCTION LOG AND ASSESSMENT RECORD

INTERNATIONAL INDEPENDENT PROJECT QUALIFICATION (9690)

Please attach the form to your candidate's work and keep it at the centre or send it to the moderator as required. The declarations should be completed as indicated.

Centre number	**Centre name**
65688	Littlewood School
Candidate number	**Candidate's full name**
12247	Matthew Leader

Work submitted for assessment **must** be the candidate's own. If candidates copy work, allow candidates to copy from them, or cheat in any other way, they may be disqualified.

Candidate declaration

Have you received help/information from anyone **other than** your supervisor (include specialist consultant if relevant) to produce this work?

☒ No ☐ Yes (give details below or on a separate sheet if necessary*)*.

Please list below any books, leaflets or other materials (eg DVDs, software packages, internet information) used to complete this work **not** acknowledged in the work itself. Presenting materials copied from other sources **without acknowledgement** is regarded as deliberate deception.

N/a

From time to time we use anonymous examples of candidates' work (in paper form and electronically) within our guidance materials to illustrate particular points. If your work appears in Oxford AQA Exams materials in this context and you object to this, please contact us and we will remove it on reasonable notice.

I have read and understood the above. I confirm I produced the attached work without assistance other than that which is acceptable under the scheme of assessment.

Candidate signature

Date 18th January 2017

Supervisor declaration

I confirm the candidate's work was conducted under the conditions laid out by the specification. I have authenticated the candidate's work and am satisfied (to the best of my knowledge) that the work produced is solely that of the candidate.

Supervisor signature

Date 18th January 2017

Candidate number	**Candidate's full name**
12247	Matthew Leader

Submission checklist

To be completed by the supervisor

International Independent Project **working** title	Are Pharmaceutical Treatments the Most Effective Method of Treating Dementia?
International Independent Project **final** title	Are Pharmaceutical Treatments or Psychological and Social Approaches the Most Effective Way of Treating Dementia?

Please note that failure to complete or submit a compulsory element may result in a mark of zero being awarded.

Select/tick	Items that **must** be included	Notes
☒	1. A signed and completed *Candidate record form, production log and assessment record*	This document. All pages must be completed.
☒	2. Research based written report	Must be 5,000 words in length (+/- 10%).
☒	3. Evidence of a presentation within the *production log*	Presentation on the project process and findings/conclusions.

Candidate number	**Candidate's full name**
12247	Matthew Leader

The taught skills element

To be completed by the supervisor

Outline details of taught skills

Record here details of relevant skills taught in a class/group and details of relevant skills taught individually to this candidate as described in the specification eg your scheme of work. Continue on a separate sheet if necessary.

All students received a 30 hour taught skills course, delivered by the supervisor in a class-room setting. This course was divided into five sections, based on the guidance in the IPQ specification:

1. Project Planning/Management
2. Research Skills
3. Report Writing
4. Presentation and Oral Communication
5. Evaluation skills

For the part of the course on Research Skills, the school librarians ran several workshops on skills including: selecting relevant resources, evaluating sources, research ethics and the importance of referening and bibligographies (in the context of avoiding plagiarism). The librarians also introducted students to the range of paper-based and online/electronic resources available in the school.

Regarding the part of the course on Presentation/Communication skills, students delivered practice presentations (on a separate subject of personal interest), to implement the skills learned.

The taught skills course was based on a number of resources, including the OxfordAQA Scheme of Work (https://oxfordaqaexams.org.uk/subjects/projects/ipq) and some online resources from:

- Southampton University: https://www.southampton.ac.uk/learnwithustransition/epq-support/index.page,
- Manchester University (Resources for Extended Project tutors and assessors): http://www.manchester.ac.uk/connect/teachers/students/post-16/extended-project/resources/
- Birmingham University (Research and Study Skills: Academic Writing): https://www.birmingham.ac.uk/Documents/students/guide-to-academic-writing.pdf

No additional/specific skills were taught to the particular student in question.

Candidate number 12247

Candidate's full name Matthew Leader

Record of grade

To be completed by the supervisor
Grades must be awarded in accordance with the instructions and criteria in the specification.

Has the student done the following:

Identified and selects an area of interest.	[✓ Yes]	No
Set a working title.	[✓ Yes]	No
Undertaken a risk assessment.	[✓ Yes]	No
Produced a project plan.	[✓ Yes]	No
Implemented the project plan and documents any changes to it.	[✓ Yes]	No
Produced a report addressing the selected final title.	[✓ Yes]	No
Used a referencing method.	[✓ Yes]	No
Communicated findings in the report and the presentation.	[✓ Yes]	No
Created a bibliography/reference list.	[✓ Yes]	No
Evaluated the strengths and weaknesses of the project.	[✓ Yes]	No

If you answered "No" to any of the above, the student must be awarded a Grade U. If all answers are "Yes" proceed to the Grading section below.

Grading

Which grade descriptor is the project most like? (circle one)

[✓ A]

If you selected **A**, is the project an **A**,
or is it better (**A***)
or worse (**B**)?
(circle one)

[✓ A*] **A** **B**

D

If you selected **D**, is the project a **D**,
or is it better (**C**)
or worse (**E**)?
(circle one)

C **D** **E**

If you selected **E** above, as a final check,
is the project worthy of a pass (**E**) as
opposed to a fail (**U**)?
(circle one)

E **U**

Candidate number	**Candidate's full name**
12247	Matthew Leader

Record of grade (continued)

To be completed by the supervisor

Summary information to show how the grades have been awarded should be given in the spaces below in addition to comments in other pages of this document and any supporting information in the form of annotations on the candidate's work.

Assessment objectives	Supervisor's supporting statement
AO1: **Selection of topic**	Very detailed identification and justification of the topic in the Record of Initial Ideas. Good evidence of highly effective preliminary research, facilitating an enterprising investigative project. Particularly clear description of the intended work in the Part A Candidate Proposal. Part B and Part C of the proposal contained excellent advice to the student. The title was changed in Planning Review, in response to advice given.
AO2: **Planning, monitoring and developing**	There is a detailed working plan, focussing on answering five questions. Good resource base established. Detailed working plan leading up to Mid-Project Review in Appendix 1. Evaluation of sources acquired revealed gaps to be filled. Final title confirmed. Detailed plan for the report drafted (Appendix 3). Further evaluation and subsequent adaption on the report in Project Product Review. Decision making to develop the work documented in detail in the log. Intelligent changes made to title and approach in response to advice received and the student's evaluation of progress. An exceptionally high level of project management, including meticulous planning and rigorous development.
AO3: **Demonstration of research skills**	Extensive bibliography of texts and journal articles. Most appeared to have been peer-reviewed; this was enhanced by rigorous source scrutiny of nine key sources. Information and data appropriate to the target therapies was acquired and critically analysed. Nothing more could be expected of this student.
AO4: **Analysis and application of research**	Material relevant and well structured. Information and data appropriate to the target therapies was acquired and critically analysed. The report was of a standard that ranks with the highest quality. The conduct and effectiveness of the therapies were described and compared to reach a brave conclusion, which will not find favour in many medical communities. Particularly fluent report, which was necessarily highly technical but still accessible to the general reader (not a requirement however). The full range of higher skills was demonstrated consistently throughout the work. Precise referencing throughout the report. Clear evidence of critical analysis and of review against theories/concepts of dementia treatment. The conclusion was based on the student's evaluation of the evidence considered. The presentation was rather long, but showed a high level of evaluation of both the development and outcome of the work and of the process used. Highly effective oral communication (Presentation Record Part B). Answers to skilfully chosen questions confirmed the student's understanding all aspects of dementia studies.
AO5: **Evaluation of product, process and self**	Rigorous reflection on own learning and process. The former showed the development from 'a brief and unspecialist understanding' to one of considerable mastery of the topic, demonstrating insightful and sophisticated evaluation. The latter identified the skills developed and their utility for future use, with time management as the main weakness. Excellent advice given to future EPQ students.

Candidate number 12247

Candidate's full name Matthew Leader

Record of grade (continued)

Supervisor's concluding comments

An exemplary project in every aspect; planned and researched in detail, thoughtfully and thoroughly evaluative at every stage, and with a report that very skilfully draws on and synthesises material from a wide range of very academic texts, to reach its well-judged conclusion.

Comment [A1]: Note – this is an exeptional project – one of the very best. It is important to note that a project does not need to reach this level to be graded an A*.

Internal moderation comments if appropriate

Supervisor declaration

I confirm that no work assessed for the award of the grade above is also to be submitted, or has been submitted, for any other accredited qualification(s).

Supervisor signature

Date 22nd January 2017

Candidate number
12247

Candidate's full name
Matthew Leader

Record of initial ideas

To be completed by the candidate

This page records initial meeting(s) with your supervisor to agree your project ideas. Additional pages can be submitted if more than one idea has been explored.

My idea(s) for topic/title:

I have chosen the issue of dementia, a general term for symptoms mainly involving impaired memory, as my topic. I will mainly be focusing on Alzheimer's Disease, a specific form of dementia which accounts for a large proportion of all cases. I have chosen this topic because as the prevalence of dementia is steadily increasing it is leading to increasing controversial debate about what the best way to combat this rise, which I find to be inspiring and thought-provoking. Therefore the title I have chosen is 'What is themost effective method of helping people cope with dementia?

Comment [A2]: AO1 – An appropriate area of interest is identified and selected after careful consideration.

My preliminary research and development of my project ideas:

The main two broad methods I plan to be focusing my project on are: drug treatments and therapeutic treatments. Although I do not have any physical resources yet, I will have them in the very near future. I have a pending order for 'Memory: a Very Short Introduction' by Jonathan K Foster and 'Being Mortal: Illness, Medicine and What matters in the End' by Atul Gawande. I also plan to obtain the book 'Dementia: The One Stop Guide' by June Andrews, an expert in dementia, either borrowed from a library or bought online. I believe that this book could provide me with a more personal, while still developed, insight into how families of dementia sufferers by to help the sufferers cope and the effectiveness of their approaches. By reviewing all of these resources, along with a few other reports and internet sources, I will form a balanced conclusion by weighing up all the advantages and disadvantages of each argument for the success of a method. For example, I could look at how invasive some of the methods are in the lives of sufferers, or why the significant of side effects of some drugs limits the utility and negatively impacts the sufferers. I also plan to inciude information about the shortcomings of the way the NHS handles dementia and how they could do more to help people suffering from it. The ideas for improvements will come from the resources I have stated above.

Comment [A3]: AO1 – Preliminary research appears highly effective.
AO3 – Sources selected for a clear nad justified purpose

Comment [A4]: AO2 – Early evidence of a clear, strategic approach to planning.

My summary of the comments and advice from my supervisor (and specialist consultant if applicable):

My supervisor said that I had chosen an interesting topic, but advised me that my title could be more specific and link more to the treatments of dementia I plan to be evaluating, so I have since tweaked the title to achieve this. My supervisor also pointed out that if I am planning to compare pharmaceutical and non-pharmaceutical treatments I should also be more specific, and give the names of the drugs and therapies. He also raised the question of there maybe not being enough material available for me to use to fully evaluate the methods used. I believe that because dementia is such a growing global problem that many research studies will have been undertaken revolving around causes, prevention and possible cures and treatments, so therefore I am going to stick with the topic. My supervisor also mentioned that I should explicitly define what an effective treatment for dementia entails. In a previous IPQ lecture we were reminded of the importance of filling in our coursework log books to keep track of the work and therefore I wm be making sure I completely fill this in, and in a very recent lesson we were taught about effective note-taking which will be helpful for getting the most out of my resources.

Modifications I have made as a result of my discussion with my supervisor (and specialist consultant if applicable):

In response to the feedback received from mysupervisor, I began doing more research online looking for sources and found 2 new sources: 'Treating Dementias – A New Generation of Progress' by Edwin M. Meyer, James W. Simpkins, Jyunji Yamamoto and Fulton T. Crews, which I plan to find at the Wellcome Library in London, and also the Scottish Intercollegiate Guidelines Network's 'Management of patients with Dementia' article which is a 57-page document on the internet I will use these new sources along with the other books I have mentioned above which so far I have found quite useful. although 'Memory: A very Short Introduction' has less on dementia than I expected. To compensate for this I plan to find 1 more resource soon, bringing my total up to 5. I plan to make notes on each of these books using the effective note-taking method taught in a recent IPQ lesson. I have also tweaked my title slightly, and it is now 'Are pharmaceutical treatments the most effective method of treating the symptoms of dementia?' From my research I have discovered that the main drugs used fall under the categories of acetylcholinesterase inhibitors and NMDA receptor antagonists. Other, non-phannaceutical methods are mostly talking therapies like cognitive behavioural therapy. I plan to focus on 2 of 3 drugs and non-drug treatments. As for defining what an effective treatment for dementia is, from partially reading 'Being Mortar, I decided that an

Comment [A5]: AO2 – Development (of title/aims) effective treatment is one that helps maintain the patient's quality of life and mind, helps control symptoms and helps the patients to maintain their independence in life for as long as possible. I have also come up with a set of sub-questions that I could focus my research around to promote efficiency. These are: "What is dementia and what are the main causes of it?"; 'Which pharmaceutical treatments are used and what are the arguments and the evidence supporting and opposing the effectiveness of them; "Which non-pharmaceutical treatments are used and what are the arguments and the evidence supporting and opposing the effectiveness of them?"; and "Which arguments are stronger?". These questions may change as time goes on if I see fit

Comment [A6]: AO2 – Clear and detailed development
AO2 – Evidence of strategic approach to planning.

My proposed title, aims and objectives:

Are Pharmaceutical Treatments the Most Effective Method of Treating Dementia?

- What is dementia and what are the main causes of it?
- Which pharmaceutical treatments are used and what are the arguments and the evidence supporting and opposing the effectiveness of them
- Which non-pharmaceutical treatments are used and what are the arguments and the evidence supporting and opposing the effectiveness of them?
- Which arguments are stronger?

Date 8th January 2016

Candidate number	**Candidate’s full name**
12247	Matthew Leader

Part A: Candidate proposal

To be completed by the candidate

Working title of my International Independent Project.
Present the topic to be researched in the form of a short statement/question/hypothesis with clear focus.
Are Pharmaceutical Treatments the Most Effective Method of Treating Dementia?

My initial resources will be

My initial resources will be 'Being Mortal' by Atul Gawande, 'Dementia: The One Stop Guide' by June Andrews, : Treating Dementias – A New Generation of Progress' by Edwin M. Meyer, James W. Simpkins, Jyunji Yamamoto and Fulton T. Crews, and 'Management of patients with Dementia' by the Scottish Intercollegiate Guidelines Network. I will continue looking for an alternative source to 'Memory: A very Short Introduction' by Jonathan F Foster.

Comment [A7]: AO3 – Excellent initial selection of sources – relevant and rigorous

The courses of study or area(s) of personal interest to which the topic relates

I hope to study Medicine at university and I believe that this topic will help me to develop my understanding of patient comfort and possibly ethical issues surrounding the use on non-approved treatments. I have not covered anything to do with dementia before in lessons.

My project aims and objectives

I intend to write a 5000-word report on the stated title. It will revolve around 4 questions: "Which pharmaceutical treatments are used and what are the arguments and the evidence supporting and opposing the effectiveness of them?"; 'Which non-pharmaceutical treatments are used and what are the arguments and the evidence supporting and opposing the effectiveness of them?"; and 'Which arguments are stronger?". To achieve the product I will consult the 4 sources already stated as well as another source for which I am currently searching for. As time goes on I plan to increase my number of sources as I will be researching sources on ideas found in the initial sources.

Provide details of the courses that you are currently studying

Qualification type	Awarding body and subject
eg A-level, IB, Modern Apprenticeship, BTEC	eg AQA Mathematics, OCR Computing, WJEC English
A-level	Mathematics
A-level	Chemistry
A-level	Biology

Qualification type	Awarding body and subject
A-level	Economics

Notice to candidate You must not take part in any unfair practice in the preparation of project work required for assessment and you must understand that to present material copied directly from any book or any other sources without acknowledgement will be regarded as deliberate deception. If you use or attempt to use any unfair practice you will be reported to Oxford AQA Exams and you may be disqualified from **all** subjects.

Candidate declaration
I certify that I have read and understood Oxford AQA Exams Regulations relating to unfair practice as set out in the notice to candidates above.

Candidate signature

Date 28th January 2016

Candidate number	Candidate’s full name
12247	Matthew Leader

Part B: Supervisor’s comments on candidate proposal

To be completed by the supervisor
Please comment below on the validity and feasibility of the candidate proposal (Part A) as an International Independent Project.

	Supervisor’s comments
Indicate the relation to, and development/extension outside of, the main course(s) of study or interest.	The proposed project relates closely to Matthew’s intention to study medicine at university and it goes beyond the scope of his A-level studies.
Comment on the suitability of the proposed initial sources and research base.	The resources mentioned are suitable, on the whole, but he needs to acquire more resources to ensure that he has enough source material to cover each side of the debate, and that the material is sufficiently academic and scientific.
Confirm that the project is feasible in the proposed timescale and/or indicate any potential difficulties that may prevent the candidate from meeting the Assessment objectives.	For the project to be feasible, the title needs to be made more specific, by specifying which alternative(s) to drug treatments will be compared. Other than that, and given the comment above about resources, the proposed project should enable an appropriately focused, well researched and evaluative project to be produced.
Comment on the suitability of the proposed title, aims and objectives.	Proposed title, aims and objectives are suitable for the IPQ.

Supervisor signature

Date 5th February 2016

Candidate number	**Candidate's full name**
12247	Matthew Leader

Part C: Centre coordinator's approval of candidate proposal

Supervisor's name

Andrew Thatcher

To be completed by the centre coordinator
If you are acting as both the centre coordinator and the supervisor, please seek counter signature from a senior colleague.

Centre coordinator's comments on the feasibility and acceptability of the proposal (parts A and B) as an International Independent Project Qualification.

This has the potential to be a very good project, but it will be important for the candidate to follow the supervisor's advice about acquiring sufficient source material on both sides of the debate. It is a condition of approval that the candidate shows that he will be able to do this by the time of his Planning Review.

☒ Approved ☐ Approved subject to the implementation of the centre coordinator's recommendations ☐ Resubmission required

Centre coordinator's name

Jenny Smith

Centre coordinator signature

Date 6th February 2016

Candidate number | **Candidate's full name**
12247 | Matthew Leader

Planning review

To be completed by the candidate

This page records your outline plan once your proposal has been approved.

My next steps in planning, researching and deadlines that I will set myself. What I intend to do, by when, what resources I will use and how I will implement the recommendations of the centre coordinator (where appropriate).

I have reflected on the comments made by my supervisor about my proposal. I agree with my supervisor that my title should be made more specific by specifying the alternatives to pharmaceutical treatments of dementia. I have therefore changed my title to 'Are Pharmaceutical treatments or Psychological and Social Approaches the Most Effective Way of Treating Dementia?'. A more specific title will enable me to concentrated on a specific set of treatments in much more depth, which could lead to a more focused and detailed final product. I also decided to separate my research questions from 3 questions into 5: Which pharmaceutical treatments are used?; What are the arguments supporting/opposing the effectiveness of pharmaceutical treatments?; Which psychological and social treatments are used?; What are the arguments supporting/opposing the effectiveness of psychological and social treatments?; Which of the arguments is stronger and why?. I believe that by doing this I will be able to answer each question in more detail and make notes more easily, making it easier to compare the advantages and disadvantages of each of the treatments when I come to writing the report This will also help me reach a more balanced, evidence-based conclusion and ultimately my project. Both my supervisor and the centre co- ordinator underlined the importance of having enough material on both sides. In order to ensure I can achieve this I have begun identifying and acquiring more resources, and have followed references in 'Alzheimer's and other Dementias' tofind books on social and psychological approaches. The resources I have identified so far are 'Excellence in Dementia care: Research into Practice' (Muma Downs and Barbara Bowers), Dementia (David Ames, Alistair Burnes and John O'Brien), and 'Drug Treatment in Dementia' (Roy Jones) - and I will make detailed notes on these in order to answer the research questions effectively and in enough detail. I have also created an appendix containing the details of my planned approach to the tasks I have yet to do, allocating my remaining time accordingly for each task. This includes finding enough resources to bring my total up to at least 10 degree-level resources. After having made sufficient notes on these resources I then plan to compile the notes into a detailedplan for the first draft of my report.

Comment [A8]: AO2 – Detailed, clear and justified development of title and approach

The reasons for my decisions.

See about section for reasons for decisions.

My summary of the comments and advice from my supervisor (and specialist consultant if applicable).

During my meeting with my supervisor, I was given mostly positive feedback by my supervisor that my title, 'Are Pharmaceutical treatments or Psychological and Social Approaches the Most Effective Way of Treating Dementia?', had been narrowed down sufficiently and focused sensibly. My supervisor also said my research questions were well thought-out which should make more focused note-taking around each research question easier and less complicated. My supervisor also said that the plan for allocating my time, outlined in Appendix 1, was detailed and reasonable. A detailed plan would play an important role in good time management for all the jobs I need to complete by the Mid Project Review. My supervisor highlighted the importance of finding enough resources so that I have enough information for both sides of each approach, and that I should show how I plan to acquire these resources such asusing the references inmy current resources to find new ones. The fact that I need to find more resources means that I need to build in more time for note-taking, so I must make sure I have enough contingency time. In an IPQ lecture before my meeting the importance of effective time management in the coming weeks was reiterated, and that a schedule which took into account extra time needed for contingency was essential otherwise we would be unlikely to complete the project to the highest standard possible.My supervisor reminded me that I should considerr a risk assessment as part of my project and asked

Comment [A9]: AO2 – meticulous planning.

me to think about whether there were any risks associated with the type of research I was proposing to carry out, or if there were ethical consideration regarding my project or research.

Modifications I have made as a result of my discussion with my supervisor (and specialist consultant if applicable).

In response to my supervisor's comments that my title should be more specific, I narrowed my title down to 'Are Pharmaceutical treatments or Psychological and Social Approaches the Most Effective Way of Treating Dementia?', which he approved of as sufficiently focused. As outlined above, I have split my 3 research questions into 5: Which pharmaceutical treatments are used?; What are the arguments supporting/opposing the effectiveness of pharmaceutical treatments?; Which psychological and social treatments are used?; What are the arguments supporting/opposing the effectiveness of psychological and social treatments?; Which of the arguments is stronger and why? After being advised my by supervisor to obtain more resources in order to make sure that I am able to reach a balanced conclusion, I researched more about books on Dementia and in addition to the resources I mentioned above, which I located in libraries and online, I found a detailed article called 'Systematic Review of Psychological Approaches to the Management of Neuropsychiatric Symptoms of Dementia' by Gill Livingston, Kate Johnston. Cornelius Katona. Joni Paton and Constantine G. Lyketsos, and have made detailed notes on the numerous psychological approaches outlined in the article. I have also made notes on all of the relevant sections of my other current resources, and am beginning to compile these notes under each research question. I have also found another article called 'Psychological treatments for depression and anxiety in dementia and mild cognitive impairment systematic review andmeta-analysis'. Furthermore, having looked at a preview of 'Treatments in Dementia: A new generation of progress', I have realised that the content of the book is much too complicated and does not focus on the topics which I need, and therefore its use as a source is very limited. I have considered the need for a risk assessment. Considering my research is secondary research I don't think I need to conduct a formal risk assessment with a form etc. and do not think my research poses a risk. I am aware there may be ethical considerations regarding my research and believe that my research can have a positive impact on the treatment of dementia patients. Again I do not intent to conduct primary research, for example experiments using humans, surveys of patients or those affected by dementia. Therefore I have assessed the risk of my project research as very low, both in terms of level of risk and likelihood of any risks occurring.

Comment [A10]: AO3 – Shows that the student's research is developing all the time…

Please append any relevant planning documentation or tools that you have used.

Date 2nd March 2016

Candidate number	**Candidate's full name**
12247	Matthew Leader

Mid-project review

To be completed by the candidate

This page records your outline plan when you have completed your research.

Is my project following my original plan? How has my plan developed?

My project has on the whole followed the original plan I made, which is on Appendix 1. Although I was not able to acquire 10 degree level resources I did manage to obtain 8, which I believe to be an adequate number and so far I do not seem to have any serious issues concerning my notes on my research questions. I was able to obtain 'Dementia' (David Ames and others) and 'Excellence in Dementia Care' (Muma Downs and Barbara Bowers) by visiting one of the libraries at UCL and with all my resources I was able to make notes and compile them under the research questions. However, after drawing up a pros and cons list for each approach I realised that I was lacking some information for the social and psychological approaches, and therefore searched for academic articles and after finding a couple I used them to fill in the gaps. Unfortunately this put me behind schedule and therefore did not have as much time as I would have liked to construct a balanced conclusion, so I will edit the conclusion after my meeting with my supervisor. My plan for how I intend to allocate my time after the mid project review can be found in Appendix 2, and my plan for my 5000 word report can be found in Appendix 3.

Comment [A11]: AO2 – Comprehensive monitoring of progress against the plan.

My summary of the comments and advice from my supervisor (and specialist consultant if applicable).

The comments given by my supervisor during my meeting with him were mainly positive. My supervisor said that I had completed the Planning Review and the first section of the Mid-Project Review thoroughly and in detail. This will be useful in judging the progression of my project. He also said that I had made well-judged changes to my title, and had produced a very detailed essay plan. This will aid me in producing a property evaluative report and will make writing the 5000-word report more straight forward. However, regarding my plan I still plan to properly read 'Dementia' by David Ames, Alistair Burnes and John O'Brien because I feel that I will be able to find some stronger points in this book. My supervisor also said that my old time plan (outlining how I aimed to allocate my time to various jobs I needed to have completed by the Mid-Project Review) was cleverly updated and allowed a clear indication of the shortcomings of that time plan and how I intended to avoid making the same mistakes in my plan for work over the summer. My supervisor did stress the importance of referencing in my draft and suggested that I do it as I go along, which I believe is good advice because it would make it much less likely for me to accidentally fail to reference a quote. My supervisor also touched briefly on the presentation, telling me the structure (Journey and What I Learned) and advising that I should practise and rehearse the presentation once I have created it This will help me to improve the delivery of the presentation.

Modifications I have made as a result of my discussion with my supervisor at this stage (and specialist consultant if applicable).

After speaking with my supervisor, I have begun to read the book 'Dementia' in order to improve my plan before I start drafting the report in order to get the maximum information for use in the report I have made sure that I understand the format of the presentation, which is for 10 minutes and in which we are supposed to talk about the- journey of our project (how we thought of it and how we narrowed down the focus) and also what we learned from doing the IPQ - both from the specific content of the project and about doing projects like the IPQ in general (e.g. planning skills). and 10 minutes of answering questions. Because the deadline for the work is just after the end of the summer holiday I have made sure to familiarise myself with it - by the 15th September the draft, the Mid-Project Review, the first section of the Product Project Review and Presentation Record Part A must be completed and uploaded to my blog. Apart from this there have been no major modifications, mostly due to the fact that my time plan is very clear already and my report plan is in enough detail that amendments will be minimal.

My final title, aims and objectives.

My final title is 'Are Pharmaceutical Treatments or Psychological and Social Approaches the Most Effective Way or Treating Dementia?' This is an appropriately focused title which will allow me to be as evaluative and specific as possible. My project will be in the form of a 5000-word evaluative report weighing up the pros and cons of each approach and using the information from several degree-level resources to come to a balanced, evidence-based conclusion on which treatment is the most effective in treating dementia. The report will include a source evaluation at the end, profiling each resource used and judging its utility based on information such as the authors, the publishers and the date of publication.

Comment [A12]: Very clear statement of main aims, title and objectives (ie how the student intends to approach the title).

My planned next steps to achieve my project's aims and objectives.

My planned next steps to complete the project are to complete a draft of my report and create a presentation before school starts in September. I aim to update my detailed plan with new points I obtain from 'Dementia' which will allow me to reach a conclusion based on more evidence, and then use this plan to write my first draft of the 5000-word report, finishing it by the 24th June. I then intend to begin working on the presentation from the beginning of August, finishing it by the 12th leaving me with a few weeks to proof-read my report, practise my presentation and complete the remaining sections of the Production Log. I am doing quite a lot of other commitments this summer so the dates are subject to change, which is why I have aimed to have the project completed by mid-August. It gives me time to catch up If I fall behind during the summer.

Comment [A13]: AO2 – Excellent time-management/planning.

Please append any relevant planning documentation or tools that you have used.

Date 28th May 2016

Candidate number	**Candidate's full name**
12247	Matthew Leader

Project product review

To be completed by the candidate

This page records the near completion of your project product. Outline the successes, failures, additions and/or changes you made as you followed the plan in your mid-project review.

Did my project follow my revised plan from the mid-project review?

On the whole, my project did follow my revised plan, although the timing I set myself may have been a bit unreasonable, although much less so than the time plan for working towards the Mid Project Review. I was able to improve and update my plan using the feedback from my supervisor and complete the Mid-Project Review in the time specified on my time plan. In this time I was also able to add to my plan using a resource I had, at the time, not utilised fully. I was also able to complete the report in the two weeks specified in the time plan, but unfortunately in completing the source evaluation, I was pushed over the 2- week mark. This was due to the fact that for the majority of the summer I was undertaking work experience from the 18th July, which finished on the 12th August. leaving me less time to write the essay than I had hoped. The contingency time I factored in to the time plan was a very good idea because it gave me time to catch up with the remaining work and complete the source evaluation. Unfortunately, the rest of the plan was not as well adhered to. Due to the increasing demand of experience as well as the requirement for me to work towards the UKCAT test, I had less time to allocate towards the project. Therefore, I had to extend the time allowance for the presentation and slightly delay the commencing of the work towards the presentation. My presentation is nearing completion, however, and I have been able to proof-read my essay to ensure that it is submission-ready.

Comment [A14]: AO2 – Again, thorough monitoring of progress.

Comment [A15]: AO2 – Excellent foresight/planning.

My summary of the comments and advice from my supervisor at this final stage (and specialist consultant if applicable).

After submitting the first draft of my written report I met with my supervisor in a meeting where we discussed the outcome of this project so far and any improvements that could be made to the draft. My supervisor said the project was good, and the report was well written with a good structure and referencing. My supervisor also said that my conclusion was clear and that my source evaluation was also quite good. My supervisor then gave me two improvements that I could make to my report. Firstly, he advised me to use more direct quotations because a direct quote could be seen as more powerful than a paraphrased one, and that it clarifies the distinction between the author's words and my own. I believe that this is a fair comment although seeing as after reading through my report I saw that I quoted quite often, I limit the number of paraphrased quotes that I make direct quotes. Secondly, my supervisor said that there may possibly be a slight over-reliance on specific resources, and that I should bring other authors into references if two authors say similar things.

Modifications I have made as a result of discussion with my supervisor (and specialist consultant if applicable) at this final stage.

Do I need to do anything else to complete my project?

As a result of meeting with my supervisor, I went back through my report and, where appropriate, converted my paraphrasing into direct quotes from the sources. This helped to give a balance between paraphrased and direct quotes. However, I did not make too many changes because, while reading through the report, I saw that the lack in direct quotes was not as large as my supervisor implied in the meeting. Therefore I only altered the quotes which I saw to be most appropriate. In response to my supervisor's comment about a slight over reliance on sources, I went back through my report and. where I saw a point which I knew 2 authors agreed on, I put down both sources. Furthermore, I went through some of the sources I used less frequently and found points in there similar to ones already in my report, and therefore I cited them as a source.

Comment [A16]: Note – this shows significant confidence and control of the project.

Please append any relevant planning documentation or tools that you have used.

Date 22nd September 2016

Candidate number	**Candidate's full name**
12247	Matthew Leader

Presentation record part A

To be completed by the candidate

This page records your presentation and its preparation.

Planned format of my 10 minute presentation (eg audience, use of visual aids, slides, use of notes, etc).

For my presentation, I plan to produce a 10 minute long presentation talking about my 'journey' undertaking the IPQ and the skills I learned in the process of completing the IPQ project I plan to present my presentation to an audience including my supervisor and a few other students who want to observe. At the end of the presentation there will be around 10 minutes, during which time members of the audience are permitted to pose questions about any aspect of my project, and therefore I must ensure that I am well prepared enough to answer any question fully. The format of the presentation will be in the form of a PowerPoint Presentation, with slides containing some information, but not all, on what I plan to talk about during the 10 minutes. The rest of the information, as well as general pointers for my personal use, will be on the notes I plan to use, in conjunction with the information on the slides, during the presentation. I plan to write the notes on small record cards which would both remove the urge to simply read off a page, and provide me with prompts to ensure that my presentation runs as smoothly as possible with no accidentally omitted sections.

Planned content of my presentation.

- **Project process:**

My presentation will follow this plan:

1. To start, I will explain why I chose the topic of dementia, and why inparticular I chose the title I did
2. I will then talk about the resources I used and how I made notes on them. I will explain the reasons for my choices in books, how I used them, and for the books I did not use much or at all, I will explain why. I will also explain what I learned from this process
3. I will then talk about how I went about completing the plan for my report. and what I learned about compiling research and the importance of methodological note taking

- **Project findings and conclusions:**

4. I will then talk about the essay itself, how and why I reached the conclusion I did, and what I learned about the constant refining process
5. I will discuss the strengths and weaknesses ofmy project, as well as evaluating how well I handled the process as a whole

Modifications I have made as a result of rehearsal and/or discussion with my supervisor (and specialist consultant if applicable):

As a result of rehearsal and reviewing, I have made some modifications to my presentation. In the outline above, I did not think that I had enough time dedicated to the actual arguments set out in my report. Therefore, I added some slides to my presentation summarising the main arguments for and against the two main types of intervention. The first few slides will be on the use of drug treatments in treating dementia and the advantages and disadvantages of their use, and the next few will be the same format but for social and psychological treatments. I will then draw the points for and against each branch of treatment into a conclusion to show how the conclusion I reached was based on evidence. I believe that this will give the audience a greater understanding of the final product that is produced after undertaking an IPQ as wellas provide them with more infonnation on the actual topic. After the section presenting my conclusion for my report, I plan to elaborate on the process of completing an IPQ, focusing on choosing resources, using the resources, making a plan for and writing the report I plan to place a particular focus on what I have learnt as a result of undertaking the IPQ, especially from these 4 phases. Furthermore, in the original plan there was no section where I talked about what I would do differently if I was to do this project again, and the impact of doing an IPQ on my future education. Therefore I have included these two areas at the end of my presentation.

Comment [A17]: AO2 – Excellent development – detailed, clear and justified.

Date 2nd October 2016

Candidate number	**Candidate's full name**
12247	Matthew Leader

Presentation record part B

To be completed by the supervisor
Record and comment below on the delivery of the presentation.

	Supervisor's record/comments
The nature of the audience should be a minimum of two adults including supervisor (include numbers of staff, students and others present).	The audience consisted of thre supervisor and one Year 12 student.
The nature of the presentation (include use of notes, use of display items, and use of presentation software).	PowerPoint presentation, delivered with occasional reference to speaking notes; spoke fluently for 10 minutes then answered questions for 10 minutes.
Comment on the content and delivery of the presentation (for example clarity of ideas, structure of presentation, pace, engagement with audience).	An extremely clear presentation, in terms both of its delivery and its structure; he engaged the audience effectively throughout, via good use of his voice and eye contact; the pace was very well judged.

Please append any relevant planning documentation or tools that you have used.

Candidate number	**Candidate's full name**
12247	Matthew Leader

Presentation record part B

To be completed by the supervisor
Record and comment below on the delivery of the presentation.

Comment on the response of the candidate to questions that demonstrated understanding and grasp of the project and/or its production. **Give examples of five questions asked and answers given.**	1. Can you explain how you evaluated your sources, giving a specific example? Talked about a text called Dementia edited by four authors; he looked at who the authors are and at the publisher; and at the references the authors and editors drew on. Asked about bias, he talked about a specific source that only put one side of the debate.
	2. What were the most useful sources in terms of researching drug treatments for dementia? Mentioned two and named the texts and authors.
	3. What were the challenges of reading technical material, for example about drug treatments? What was the most difficult material you encountered? Used online resources to help him understand difficult material, especially on future treatments.
	4. If it was someone in your family, what treatment would you advocate? What about if you were the patient's doctor? If it was a family member, psychological therapy; answered well when asked about how cost would affect it. Would talk through the options with a patient.
	5. Explain what a 'meta analysis' is. Explained this very clearly.
	6. How does dementia 'rank' in terms of the diseases affecting people today – the most threatening/getting to be a bigger problem? Said it's a severe problem but the big difference is that it doesn't kill people.
	7. Should we fund this more than cancer treatment? Answered very well, saying that cancer should receive more funding because it affects people of all ages, not just older people – and more people get cancer.
	8. How has this improved you as a student in this subject area/in general? Talked about time management, and in terms of understanding the leap from A-level to university level work.

Comment [A18]: AO3 – Evidence of rigorous source scrutiny.

Supervisor signature

Date 15th October 2016

Candidate number	**Candidate's full name**
12247	Matthew Leader

Summary and reflection

To be completed by the candidate

This page records your summary, reflection and evaluation when you have completed your report and given your presentation.

Some questions you may wish to answer in this section include, what have I learned from completing this project? What new knowledge or expertise have I enjoyed or found valuable? What are the strengths and weaknesses of my project (including planning and organisation)? What skills have I improved? What changes would I make if I undertook such work again? What advice would I give to others undertaking such a project?

Throughout the process of completing the IPQ I have learned a lot about the depths of dementia, only having a brief and unspecialist understanding at the time of commencing the project. Looking at the pathology of dementia and the ways in which drug treatments work, as well as how the personal needs of dementia sufferers are tendered to during psychological and social care, has left me with an understanding of the severity of the disease and the variety of measures taken in combating the disease. Research into the future developments aimed at curing dementia gave me an appreciation for the extensive effort of the medical field.

Comment [A19]: AO5 – Reflection on own learning – detailed and insightful.

I especially enjoyed the process of independently researching a topic of considerable interest to me. I believe that the skills I learned from the IPQ will benefit my work at university, as I have a greater understanding of how to take notes, write essays and find reliable, relevant resources. The writing of the report was especially rewarding because it allowed me to draw together all of the hard work I had done researching the topic. It was also an eye-opener to the extensive work that may be undertaken at university.

Comment [A20]: AO5 – Reflection on skills gained.

I believe that the major successes of my project have been the writing, planning, and the resources to an extent. My essay plan was very thorough due to my detailed notes on all the relevant resources, and this made writing the report in the summer much more straightforward as it was only a case of translating and articulating the material in the plan. The plan also made writing the report much more efficient and allowed enough time at the end of the summer for proof-reading. I generally planned my time well, making detailed time plans which gave much-needed structure to the 9-month process. Most of the resources I acquired were of a high academic level, and were very reliable, and therefore I believe that my good choice in resources from crucial in the writing of a well-balanced report. These strengths will help me thoughout my life, especially during university where I would have to utilise these skills to succeed at a higher level of study.

Comment [A21]: AO5 – Strong evaluation of the successes of the project.

However, there were some weaknesses during the project. One example is that although I generally planned my time well, I did over-ambitiously plan in some areas such as for the Mid Project Review. Therefore I ended up having a larger workload than I had anticipated and therefore I was quite stressed at some points. Secondly, I feel that I did not acquire the resources as early as I could have, and therefore I was slightly pressed for time when I came around to looking for them. Although in the end I was able to find high quality resources, if I had left it any later I may have slightly panicked and therefore not found many high-quality resources.

If I was to undertake such work again, I would improve my ability to factor in external commitments. Sometimes I failed to acknowledge the work required by other necessary things I had to do such as AS levels and the personal statement. I did however realise this after the Mid Project Review and although my summer plan was still not perfect, it was an improvement over the previous plan.

Secondly, I would have spent less time fully reading the resources at the beginning. I soon found out that as I acquired more high-level resources, I would be unable to read all of them fully and therefore I would have to search only for the relevant parts. However, at the beginning I was reading all my resources fully and this was very time consuming and is most likely why I struggled slightly with the workload for the Mid Project Review.

Comment [A22]: Excellent advice.

A piece of advice I would give to future students is to start working hard right at the beginning. It is easy to procrastinate and put the work off until later, but if this is done over all of the 9 months the workload at the end will be immense and too much for a person to handle. Another piece of advice I would give is that they should put as much effort into the project as possible, because the more you put in the more you gain in return. If the project is not taken seriously there is not much point doing it in the first place, and if you are not interested by the topic you chose it will show in your final report.

GET HELP AND SUPPORT

Visit our website for information, guidance, support and resources at **oxfordaqaexams.org.uk**

You can contact the IPQ team directly;

E: IPQ@oxfordaqaexams.org.uk

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The student has chosen to add additional evidence of planning. This is further evidence of the meticulous approach taken, often developing what is in the Production Log. (AO2) Note: this is not necessary for a project to achieve A*. In fact, this project would have been awarded an A* even without this additional evidence (which reflects just how good this project is!).

Appendix 1 - Plan for the Mid-Project Review

Title: I have tweaked my title slightly to be:
'Are Pharmaceutical or Psychological and Social Approaches the Most Effective Way of Treating Dementia?
(where 'treating' refers to maintaining patients' quality of life for as long as possible rather than attempting to cure the disease)

Research Questions

1. Which pharmaceutical treatments are used?
2. What are the arguments supporting/opposing the effectiveness of pharmaceutical treatments?
3. Which psychological and social treatments are used?
4. What are the arguments supporting/opposing the effectiveness of psychological and social treatments?
5. Which of the arguments is stronger?

1. What resources do I still need to acquire?

So far I have 1 detailed scientific book on treatments of dementia, one book on medicine's failures in care as a whole and one book targeted towards carers of those with dementia. I am still yet to find 'Treatment of Dementias - a new Generation of Progress', so locating it will be my first priority. I then intend to find some more degree level resources from the UCL Library list. I have already discovered an online resource 'Drug Treatments of Dementias' by Roy W. Jones, and intend to follow the sources referenced in 'Alzheimer's and other Dementias' in order to find a high level academic book on psychological and social approaches. One good reference that I have looked at is 'Excellence in Dementia Care: Research into Practice' by Murna Downs, which could prove to be a good resource for social approaches.

2. Which of them do I still need to summarise?

I have made initial summary notes of all of the resources I have currently. I am lacking detailed maps so I need to return and make detailed maps of my current resources. I should do this before I acquire any further resources to ensure that the maps I make are detailed enough and these maps will help me decide on which areas any future resources will be.

3. Will my summaries of them allow me to give comprehensive, detailed answers to my descriptive research questions?

I believe that once I have sufficient resources answering my research questions will be achievable. However, in the case that I am unable to obtain the resources I either need to narrow the focus of my research questions or search for new ones. It is therefore important that I leave enough time to rectify this should it happen.

4. Will I be able to make a good case for an evidence-based conclusion on the basis of these answers?

I believe that as long as the resources I have contain sufficient evidence on both sides for both approaches, then reaching a balanced conclusion should not be too difficult. In the event that the resources are incomplete I either need to find new ones or again narrow the focus of my research questions. It is therefore important that I leave enough time to rectify this should it happen.

Planning My Time

List of Jobs to Do

1) I intend to acquire 10 or more degree-level resources on dementia treatments, including drugs, psychological approaches and social care, through references in my current resources as well as the UCL library catalogue.

2) If the resources I need are in the library I will obtain them from the library. If they are not I will look elsewhere.

3) I then plan to make summary notes on resources by mapping the new resources for information relevant to dementia treatments.

4) Using my summary notes I will then compile these notes as answers to my research questions these to create notes that give comprehensive, detailed answers to my research questions.

5) I will then check that the pros and cons of the treatments are covered in enough depth. If they are not I will need to get more resources

6) Using these notes I will reach an evidence-based conclusion about the most effective treatment of dementia

7) After this I will write a plan for a 5000-word report that makes a strong case for my evidence-based conclusion.

Appendix 1

Available time

March

7th - 2 evenings; 1 day at weekend.
14th - 2 evenings; 1 day at weekend.
21st - 2evenings; 1 day at weekend.
28th - EASTER BREAK. 2-3 days

April – May

Revision for A levels

June

13th - 1 evening; 1/2 day at weekend.

20th - 1 evening; 1 day at weekend.

Total time available = 4.5 - 5.5 days and 7 evenings = c. 7-8 days

List of Jobs to Do - Allocated Time

1) I intend to acquire 10 or more degree-level resources on dementia treatments, including drugs, psychological approaches and social care, through references in my current resources as well as the UCL library catalogue.

2) If the resources I need are in the library I will obtain them from the library. If they are not I will look elsewhere. **[1 day]**

3) I then plan to make summary notes on resources by mapping the new resources for information relevant to dementia treatments. **[2 days]**

4) Using my summary notes I will then compile these notes as answers to my research questions these to create notes that give comprehensive, detailed answers to my research questions. **[1 day]**

5) I will then check that the pros and cons of the treatments are covered in enough depth. If they are not I will need to get more resources. **[1 day]**

6) Using these notes I will reach an evidence-based conclusion about the most effective treatment of dementia **[1/2 day]**

7) After this I will write a plan for a 5000-word report that makes a strong case for my evidence-based conclusion. **[1.5 days]**

TOTAL = 7 DAYS + up to 1 day contingency time

Appendix 1

Week by Week Plan

March

7th - Acquire 10 or more degree-level resources on dementia treatments, including drugs, psychological approaches and social care, through references in my current resources as well as the UCL library catalogue.

14th - Make summary notes on resources by mapping the new resources for information relevant to dementia treatments.

21st - Using summary notes, compile these notes as answers to my research questions these to create notes that give comprehensive, detailed answers to my research questions.

28th - Check that the pros and cons of the treatments are covered in enough depth. I will need to get more resources if I need to.

June

13th - Using notes, reach an evidence-based conclusion about the most effective treatment of dementia

20th - Write a plan for a 5000-word report that makes a strong case for my evidence-based conclusion.

Appendix 1 - Plan for the Mid-Project Review

Title: I have tweaked my title slightly to be:
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3. **Which psychological and social treatments are used?**
4. **What are the arguments supporting/opposing the effectiveness of psychological and social treatments?**
5. **Which of the arguments is stronger?**

1. What resources do I still need to acquire?

So far I have 1 detailed scientific book on treatments of dementia, one book on medicine's failures in care as a whole and one book targeted towards carers of those with dementia. I am still yet to find 'Treatment of Dementias - a new Generation of Progress', so locating it will be my first priority. I then intend to find some more degree level resources from the UCL Library list. I have already discovered an online resource 'Drug Treatments of Dementias' by Roy W. Jones, and intend to follow the sources referenced in 'Alzheimer's and other Dementias' in order to find a high level academic book on psychological and social approaches. One good reference that I have looked at is 'Excellence in Dementia Care: Research into Practice' by Murna Downs, which could prove to be a good resource for social approaches. My plan for the resources I needed changed slightly. I decided against acquiring 'Treatment of Dementias - a new Generation of Progress' because, having looked at the contents page, it seemed overly academic and not really targeted at what treatments I was looking for. Instead, I replaced it with 'Dementia' edited by David Ames, Alistair Burns and John T. O'Brien, which is much more related to the topics I am looking at.

2. Which of them do I still need to summarise?

I have made initial summary notes of all of the resources I have currently. I am lacking detailed maps so I need to return and make detailed maps of my current resources. I should do this before I acquire any further resources to ensure that the maps I make are detailed enough and these maps will help me decide on which areas any future resources will be. I have been able to summarise and make detailed notes on nearly all of my resources, although I believe that there is still more information that I can extract from 'Dementia' and 'Excellence in Dementia Care – Research into Practice'

3. Will my summaries of them allow me to give comprehensive, detailed answers to my descriptive research questions?

I believe that once I have sufficient resources answering my research questions will be achievable. However, in the case that I am unable to obtain the resources I either need to narrow the focus of my research questions or search for new ones. It is therefore important that I leave enough time to rectify this should it happen. I have been able to use my notes to answer my research questions in my plan. I was able to obtain the resources so there was no need for me to narrow the focus of the research questions.

4. Will I be able to make a good case for an evidence-based conclusion on the basis of these answers?

I believe that as long as the resources I have contain sufficient evidence on both sides for both approaches, then reaching a balanced conclusion should not be too difficult. In the event that the resources are incomplete I either need to find new ones or again narrow the focus of my research questions. It is therefore important that I leave enough time to rectify this should it happen. My plan contains an evidence-based conclusion based on my answer to the research questions, although because of time constraints due to an extended exam period and needing to go back and make more notes after reviewing my pros and cons list, the conclusion is not as balanced and inclusive as I would have liked. Therefore I plan to edit the conclusion after the meeting with my supervisor.

Planning My Time

List of Jobs to Do

1) I intend to acquire 10 or more degree-level resources on dementia treatments, including drugs, psychological approaches and social care, through references in my current resources as well as the UCL library catalogue.

2) If the resources I need are in the library I will obtain them from the library. If they are not I will look elsewhere.

3) I then plan to make summary notes on resources by mapping the new resources for information relevant to dementia treatments.

4) Using my summary notes I will then compile these notes as answers to my research questions these to create notes that give comprehensive, detailed answers to my research questions.

5) I will then check that the pros and cons of the treatments are covered in enough depth. If they are not I will need to get more resources

6) Using these notes I will reach an evidence-based conclusion about the most effective treatment of dementia

7) After this I will write a plan for a 5000-word report that makes a strong case for my evidence-based conclusion.

Available time

March
7th - 2 evenings; 1 day at weekend.
14th - 2 evenings; 1 day at weekend.
21st - 2evenings; 1 day at weekend.
28th - EASTER BREAK. 2-3 days

April – May

Revision for A levels

June
13th - 1 evening; 1/2 day at weekend.

20th - 1 evening; 1 day at weekend.

Total time available = 4.5 - 5.5 days and 7 evenings = c. 7-8 days

List of Jobs to Do - Allocated Time

1) I intend to acquire 10 or more degree-level resources on dementia treatments, including drugs, psychological approaches and social care, through references in my current resources as well as the UCL library catalogue. I was able to do this on time.

2) If the resources I need are in the library I will obtain them from the library. If they are not I will look elsewhere. **[1 day]** The resources were indeed in the UCL library.

3) I then plan to make summary notes on resources by mapping the new resources for information relevant to dementia treatments. **[2 days]** I

was able to complete detailed maps on most of my new resources, although I was lacking some information from one or two of them

4) Using my summary notes I will then compile these notes as answers to my research questions these to create notes that give comprehensive, detailed answers to my research questions. **[1 day]** I was able to do this in my plan on time

5) I will then check that the pros and cons of the treatments are covered in enough depth. If they are not I will need to get more resources. **[1 day]** This took longer than expected because I failed to realise that because I lacked pros and cons I would need to make more notes, which I did not factor in at the time.

6) Using these notes I will reach an evidence-based conclusion about the most effective treatment of dementia **[1/2 day]** I was able to reach an evidence-based conclusion although as stated above it was not as balanced as it could have been

7) After this I will write a plan for a 5000-word report that makes a strong case for my evidence-based conclusion. **[1.5 days]** The time frame was appropriate and I was able to complete this on time.

TOTAL = 7 DAYS + up to 1 day contingency time

Week by Week Plan

March

7th - Acquire 10 or more degree-level resources on dementia treatments, including drugs, psychological approaches and social care, through references in my current resources as well as the UCL library catalogue.

14th - Make summary notes on resources by mapping the new resources for information relevant to dementia treatments.

21st - Using summary notes, compile these notes as answers to my research questions these to create notes that give comprehensive, detailed answers to my research questions.

28th - Check that the pros and cons of the treatments are covered in enough depth. I will need to get more resources if I need to.

June

13th - Using notes, reach an evidence-based conclusion about the most effective treatment of dementia

20th - Write a plan for a 5000-word report that makes a strong case for my evidence-based conclusion.

Appendix 1A

This plan was quite overambitious due to the fact that I underestimated the time I would need to spend revising for my A-Levels and I also failed to integrate in the fact that my exams finished on 24th June

APPENDIX 2

By the time of my meeting with my supervisor on the 1st July, I will have completed a detailed plan for my 5000 word essay with the sections based around the research questions I have developed. This will allow me to bring together all strands of my research into one comprehensive document and will make writing the draft more straightforward. By this time I will also have been able to reach an evidence-based conclusion from the information in my plan. During the meeting I will receive feedback from my supervisor which will allow me to fully complete the mid-project review, and use the advice given in the meeting to amend my plan where I see fit.

Work List

1. Improve plan after considering feedback from supervisor
2. Write a 5000 word draft of my report, using my essay plan, making sure that Harvard-style referencing has been used throughout
3. Write a source evaluation which covers all the sources I have used
4. Edit draft report carefully according to feedback given by my supervisor
5. Prepare 20 minute presentation on PowerPoint
6. Complete the final sections of my Production Log and prepare my project for submission

Time Remaining

After my meeting with my supervisor, I will have about 8 weeks to complete the work list outlined above. Due to other commitments in these 8 weeks it is crucial that I divide up my time in an effective and sensible way, making sure I do not make the mistake of being over-ambitious in my intentions again.

Work Plan

1. **9th-10th July** - Improve plan using the feedback from my supervisor, and complete Mid Project Review

2. **11th-24th July** - Complete my 5000-word essay draft, and the source evaluation

3. **25th-29th July** - Contingency time - Complete any work I have been unable to finish and begin creating the 20 minute presentation

4. **1st-12th August** - Finish presentation and notes; finish learning presentation and notes

5. **Rest of summer** - Complete the final sections of my Production Log. Check through all my work to make sure it is submission-ready

Here, the student has chosen to add a detailed plan of the report. This is not necessary to achieve an A*, but in this case demonstrates further the meticulous nature of this student's approach. Appendix 3 also demonstrates how well resources have been used and the strategic nature of the approach taken, e.g. the student has devised a rating system to assess arguments.

Appendix 3: Planning my Draft Report

Are Pharmaceutical Treatments or Psychological and Social Approaches the most Effective Way of Treating Dementia?

Pharmaceutical

Drug group	Efficacy
GALANTAMINE • A 'reversible, competitive inhibitor of acetylcholinesterase' (DTID p39), and an 'allosteric modulator of nicotinic cholinergic receptor's **(Jones 2000: 49)**	• "Statistically significant improvements in both psychometric scales and clinician's interview-based assessments" **(Jones 2000: 49))** • "patients treated with galantamine for one year maintained their memory and cognitive function above baseline" **(Jones 2000: 49)**
DONEPEZIL • A 'pipendine based reversible inhibitor of acetylcholinesterase' • Highly selective for ACE and is much less active against BCE 5mg/day can lead to 64% ACE inhibition in red blood cells - up to 77% with 10mg/day **(Jones 2000: 41)**	• In a study of 473 patients 26% of patients on 10mg/day "improved by 7 points or more on the ADAS-Cog" **(Jones 2000: 41)**but from the results when all patients entered a "6 week placebo washout", we can see that the benefits are purely symptomatic **(Jones 2000: 41)** • "modest improvements in cognitive function" **(Jones 2000: 43)**; "reduction in neuropsychiatric symptoms in nearly 40% of patients associated with reduced carer distress" **(Jones 2000: 43)** • In a double-blind trial, donepezil was able to keep cognition at or near baseline for 1 year, which was much better than the placebo **(Jones 2000: 43)**
RIVASTIGMINE • A 'centrally selective carbamate inhibitor of acetylcholinesterase' • 3mg oral dose a day leads to a 30-40% inhibition of central acetylcholinesterase with almost no effect on acetylcholinesterase levels in red blood cells or plasma **(Jones 2000: 44)**	• "consistent significant difference in efficacy" when 6-13mg/day of the drug was compared to a placebo **(Jones 2000: 46)** • In the ADENA study (p46), there was "the largest drug vs. placebo difference that 'had been reported to date for a dementia drug" at 4.94 points
MEMANTINE • 'Blocks NMDA receptor channels in the resting state, leaving channel on physiological activation during memory formation' **(Jones 2000: 57)** • Can provide protection against the 'activation of glutamate receptors' **(Jones 2000: 57)**	• Doses from 20-30mg caused 'significant improvements in cognitive disturbance, drive and motor functions' **(Jones 2000: 57)** • With 10mg/day given to patients with severe dementia, there was "significant improvement in

(Rating system: 1-5; 5 = very strong argument, 1 = very weak argument)

ANTIPSYCHOTICS - Used when there is suspicion of hallucinations or delusions, or to calm patients who are aggressive or agitated - 2 types - typical and atypical	functioning, care dependence and behavioural symptoms over a period of 12 weeks" **(Jones 2000: 57)** - The drugs 'may be sedating' which means that it is not treating the underlying condition **(Hughes 2011: 122)** - Sometimes the delusions may be "confabulations" **(Hughes 2011: 122)**

Pros of Drugs	**Cons of Drugs**
- Treatment using drugs is much more cost-effective than the costs of institutionalisation and/or informal care - in 1992/3 the costs were "so little that they were not even reported by the UK NHS Executive" **(Jones 2000: 105)** [4- this is a major advantage for drugs because the fact that dementia is incurable at present means that efforts are focused on improving quality of life, and the inexpensive nature of drugs relative to social care means that more money could be put towards finding a cure in the future]	- The drugs listed often have numerous side effects which cause more distress than relief to the patients, in contrast to psychological approaches which "have no adverse effects **(Orgeta et al. 2015: 297)**". For example common side effects are nausea, dizziness, vomiting, fatigue and diarrhoea [2 - These side effects are often mild and transient, disappearing a few weeks into starting the drug or a higher dosage, which suggests that side effects are not a major persisting issue. Furthermore, side effects will not affect all patients]
- There is a potential for drugs to be developed which could modify the disease process and not just treat symptoms "Given the increasing understanding of the brain and the pathology of the dementias, we might expect that advances in pharmacological treatment should be just around the corner. Indeed, we are expecting to see novel treatments very soon" **(Hughes 2011: 124)** [3 - True, but because there are still many things we do not know about the pathology of dementias progress in synthesising highly effective drugs will be limited, although technology is advancing at such a fast rate that the gaps in our knowledge may be filled in more rapidly than first thought]	- The drugs may lose their effectiveness if treatment is continued for too long "Open-label data for 2 years or more show a gradual deterioration after 26 weeks' total treatment time " for donepezil **(Jones 2000: 43)** [2 - this data is only applicable to one drug of many, and as the other drugs do not seem to suffer from this problem its impact is insignificant. Furthermore the patients in this trial had cognitive functions above baseline up until 50 weeks]
- There is evidence from numerous RCTs which show that the drugs commonly used have positive benefits such as improvements in cognitive function and reduced neuropsychiatric symptoms. For example , rivastigmine demonstrated "consistent significant difference in efficiency" compared to a placebo **(Jones 2000: 46)**, and with galantamine "After 6 months, by comparison with placebo, galantamine can reduce the time carers spend supervising patients by up to two hours a day **(Jones 2000: 50)**; "A recent Cochrane Review	- Currently, there are no drugs available that have the ability to affect the disease process to an extent that the disease will be potentially reversible, therefore meaning that of all the drugs for treating dementia none can actually cure it. [4 - As long as dementia remains incurable the burden on health services and institutions will increase and the pressure to find a cure will follow, especially seeing as there are ageing populations developing in several countries. Even though research is being undertaken to create these cures there are still "gaps in our understanding"] - The inability of patients to tolerate certain drugs

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(Birks 2006) concluded that there was sufficient evidence to say that when used over a 6-month period the drugs produce small improvements in overall cognitive functioning..." **(Downs and Bowers 2008: 157)** [3/4 - There have been several reliable studies carried out but from these studies some of the claims of the efficacy of certain drugs have limited evidence; Even though the improvements are only small, the fact that dementia is a difficult disease to treat means that any method which disrupts the downward spiral should be seen as effective]	restricts the ability of these drugs to have a widespread impact in the field of dementia medicine, and because the focus of drug development for dementia now is no altering the disease process the issue of many sufferers may not being able to tolerate the drugs may go unresolved [4 - This is a big issue in the progress of drug treatments in dementia - if patients cannot tolerate the drugs then the money spent on developing them is effectively wasted]
• Cholinesterase inhibitors "have demonstrated a significant improvement not only in cognitive function and global assessment but also in behaviour" **(Jones 2000: 79)**. Several studies have also proven that this class of drugs is effective at treating the symptoms of dementia, and can even improve symptoms of depression which is common in dementia patients [4 - similar to above]	• The medley of drugs that many dementia patients are required to take, "polypharmacy", means that regular drug reviews must be taken in order to avoid the development of serious adverse symptoms "we know, for example, that in the middle part of the dementia journey blood pressure can fall due to dementia related weight loss and changes in cardiovascular reflexes. Thus, a treatment that was once highly appropriate may become potentially harmful and, particularly for drugs that are fat soluble and capable of entering the brain, increase the risk of delirium" **(Downs & Bowers 2008: 239)** [5 - It is very important that people with dementia are receiving the best treatment possible, and due to further medical problems associated with the progression of the disease treatment must be constantly updated to ensure maximum efficacy. This regular review may be inconvenient to both parties and may be ignored with drastic consequences]
	• The simple prescription of drugs to treat the psychological symptoms may not help with the common "co-existing medical conditions in people with dementia " **(Downs & Bowers 2008: 231)** such as unhealthy diets, which are more likely to be noticed earlier in social care or therapy sessions than in infrequent doctors' appointments "one prospective study identified 248 other medical problems in 124 of 200 older people with dementia attending an outpatient service" **(Downs & Bowers 2008: 231)** [4 - It seems that drugs will not be enough on their own - because dementia can lead to so many problems, trying to correct all of them with drugs will lead to a substantially lower quality of life]

(Rating system: 1-5; 5 = very strong argument, 1 = very weak argument)

Psychological and Social

Therapy	Efficacy
COGNITIVE TRAINING • "practice of standardized tasks which focus on specific domains of cognition, such as memory, executive functions or attention" **(Downs & Bowers 2008: 158)**	"Some studies have reported significant improvements in the areas specifically targeted by the training, however these benefits do not seem to generalize to wider aspects of daily life" **(Downs & Bowers 2008: 158)**
COGNITIVE STIMULATION • "'engagement in a range of group activities and discussions aimed at general enhancement of cognitive and social functioning'" **(Downs & Bowers 2008: 159)** • Instead of targeting specific domains it is evaluated in a general way - "general impact on cognitive functioning using scales" **(Downs & Bowers 2008: 159)** • EG **Reality orientation; Reminiscence therapy**	• "some evidence that RO had benefits to both cognition and behaviour"; "provided further evidence of significant impact of RO... on both cognitive functioning and quality of life" **(Downs & Bowers 2008: 159)** • "A systematic review of research on reminiscence (Woods et al. 2005)... found significant benefits on general behaviour, cognition and mood" **(Downs & Bowers 2008: 159)**
COGNITIVE REHABILITATION • "the main focus in on optimizing remaining cognitive functioning, finding ways around difficulties, reducing their impact or helping someone live more comfortably with their limitations" **(Downs & Bowers 2008: 160)**	• "Given that the approach is centred on the person's own unique needs and that the programme is designed especially for them. the approach fits well with the principles of person-centred dementia care" **(Downs & Bowers 2008: 161)**

Social Care type	Efficacy
CARE HOME • "While the number of people with dementia living in all types of care homes is unknown, it is substantial" **(Downs & Bowers 2008: 336)** • "Family cares often make decisions about moving to a care home based on what they believe is in the best interest of the person they are caring for" **(Downs & Bowers 2008: 337)**	• "People living with dementia at home alone are 20 times more likely to move into residential or nursing care than those living with a family member"**(Downs & Bowers 2008: 287)**
FAMILY CARER • "In many countries, an overriding objective for social care is to maintain people with dementia in their own home for as long as possible" **(Downs & Bowers 2008: 285)** • "Most people with dementia are able to live in their own homes for most of their lives, and most care is given by families (NCCMH 2007:98)" **(Downs & Bowers 2008: 285)**	• "People living with dementia at home alone are 20 times more likely to move into residential or nursing care than those living with a family member"**(Downs & Bowers 2008: 287)** • "Family cares who live with the person with dementia often describe greater difficulty than those who live elsewhere" **(Downs & Bowers 2008: 288)**

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Pros of Psychosocial approach	**Cons of Psychosocial approach**
• **S**: The advantage of social care over treatment using drugs is that social care is more personal and may provide people with dementia with the personal support they need "People living with dementia at home alone are 20 times more likely to move into residential or nursing care than those living with a family member" **(Downs & Bowers 2008: 287)** [4 - In the modern world which has an intent focus on curing diseases, it is easy to forget that sometimes people just being there to support sufferers can make a huge difference in their lives] • **P**: There is evidence from several studies to suggest that psychological interventions can improve medical issues commonly found alongside dementia - for dementia "Results significantly favoured psychological treatment... with little heterogeneity between studies" (BJPSYCH p3) "These have all demonstrated some success in alleviating anxiety and depression in people with dementia" **(Downs & Bowers 2008: 252)** [2 - the evidence from these studies is not as strong as it should be - only "one of the studies" was "low risk in all domains". Furthermore there was "limited evidence that they can reduce anxiety"] • **S**: Social care , if done correctly, creates a positive environment with life and excitement has the potential to breathe life into disengaged patients and improve their quality of life and wellbeing "Even residents with dementia so severe that they had lost the ability to grasp much of what was going on could experience a life with greater meaning and pleasure and satisfaction" **(Gawande 2014: 125)** [3 - although this is very promising the truth is that most places do not understand that for elderly patients with dementia life is not just about safety - their view is narrow and this negatively impacts the quality of life for these patients] **NOTE: I still have 1 or 2 resources from which, although I have read them, I believe it is possible for me to get more information from them and therefore I am looking to add more points to my plan**	• **S**: Sometimes in social care the mantra of 'safety first' has become overly important and people with dementia living in care homes or receiving help from care groups may lose the ability to do things they wanted to "It has been suggested that the way people are treated (Sabat 1994) can result in behavioural and emotional difficulties, increasing their degree of disability. Staff often take over tasks that individuals are still capable of engaging with because of the focus on efficiency" **(Downs & Bowers 2008: 347)** [4 - It is important that even dementia patients retain some sense of autonomy and independence, otherwise they may feel helpless and become increasingly dependent on care staff and family members who may see their workloads increase] • **S**: People in social care may feel that they've lost their individuality and that they have no say in how the rest of their lives play out - "There is a risk that those receiving care feel like cogs in a large machine they do not control. "Allowing people to stick to habitual routines is a relatively simple way to provide individualised care" **(Downs & Bowers 2008: 173)** [3 - This is an issue which many institutions seem to ignore] • **P**: It can be said that in psychological treatments of dementia we are focusing on the wrong areas "Progressive cognitive impairment is, after all, an inevitable consequence of having dementia. Trying to hold it back could be likened to King Canute trying to hold back the tide" **(Downs & Bowers 2008: 164)**; furthermore, "interventions that concentrate on cognitive functioning may be seen as forcing the person to face their deficits, putting them into embarrassing or shameful positions that expose their vulnerability" [3 - Just because it is inevitable does not mean that we should not try anything to slow the progression; This is true but if the session is conducted in a way that eases the patient into it this should not be an issue] • **P**: The way the psychological treatment is approached is very important - "An insensitive attempt to introduce cognitive interventions could increase distress and defensiveness. No-one wants to see people with dementia brutally corrected whenever they voice their confusion" **(Downs & Bowers 2008: 164)** [3 - similar to 2nd half of point above] • **S**: Sometimes elderly people will feel out of place in a care home - they will feel uncomfortable and withdrawn in the new environment and will not be able to adjust because care homes do not understand what makes their lives worth living "The problem with medicine and the institutions it has

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	spawned for the care of the sick and the old is that they have had an incorrect view on what makes life significant" **(Gawande 2014: 128)** "We seek a life of worth and purpose" **(Gawande 2014: 128) [5- This is one of the biggest issues with the way modern medicine cares for the elderly, and one of the reasons why many elderly people resist institutionalisation. A life in which safely comes before all else is essentially a life with no purpose and this is what needs to be reviewed in care homes]** • **P**: We need to make sure that psychological interventions are custom made for patients' needs and not fall into the incorrect way of thinking that one therapy fits all, otherwise there will be no progression in these types of treatments "We are in danger of assuming that because we have an emerging evidence base for the effectiveness of psychological approaches... that we should apply this approach to all people with dementia. However such approaches should be individualized and tailored to address each person's unique concerns and circumstances" **(Downs & Bowers 2008: 159) [**4 - therapies specifically designed for people's needs will be much more effective than generic ones which may not fully target the areas in which people are weakest**]**

PLAN

Introduction: Outlines what the report will be arguing

Section 1: Gives a brief overview of different drugs used

Section 2: Gives arguments for and against the use of drugs

Section 3: Gives a brief overview of psychological approaches and different social approaches

Section 4: Gives arguments for and against the use of social care and psychological interventions

Section 5: A conclusion which sums up the arguments and gives an evidence-based reason why psychological and social approaches are better

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Conclusion

On the whole, there is a strong case for the use of psychological and social approaches over the use of drugs in treating dementia. Approaches such as cognitive stimulation therapy avoid the issue of rather unpleasant side effects such as diarrhoea and dizziness while also assisting in improving cognitive function in dementia patients. Related to this, using psychological interventions instead of drug treatments avoids the problem of patients being on multiple pharmaceutical treatments at once and therefore subject to frequent incontinent check-ups with their doctors. Furthermore, social care is able to rekindle enjoyment and excitement in people with dementia by providing them with ways to engage in activities, which, when suffering from an incurable disease which often leads to depression, is arguably more important than trying to treat the disease with drugs which cannot reverse the damage.

However, on the other hand some may say that the towering costs of social care over the money spent on the development of drugs proves that drugs are much more cost effective than creating institutions to take care of dementia patients. Furthermore, it is much more difficult to prove the effectiveness of psychological interventions simply due to the fact that they cannot undergo the same rigorous methodical testing that drugs can, and therefore the results are more subjective. Another argument focuses on underperformance in social care environments, which often struggle to meet the hopes of all the residents living there in terms of lifestyle and independence, although raising awareness of this issue should lead to a step in the right direction.

Overall, although it is difficult to ignore the case against psychological and social approaches, the fact that similar improvement rates have been seen through these compared to drugs, considering the side effects that drugs can produce and bearing in mind that presently there are no cures for dementia, psychological and social approaches seem to be the most effective way of treating patients with dementia while maintaining their quality of life. The future looks promising in terms of the development of drugs that have the potential to reverse the disease progress, but until then the use of drugs should be focused on research purposes with the main treatment coming from therapy and social care.

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- The implementation of the project plan is clear throughout. (AO4)
- The report analyses and synthesises findings with a degree of refinement that demonstrates subject mastery. (AO4)
- The report is organised in a fluent, highly technical but also highly readable way. (AO4)
- Analysis and synthesis are demonstrated consistently throughout. (AO4)
- There is an excellent section on source scrutiny (after the bibliography) which shows a rigorous approach. (AO3)
- Referencing is excellent (AO4) and information from sources is identified systematically and effectively with their relevance always being clear (AO3)

Are Pharmaceutical Treatments or Psychological and Social Approaches the most Effective way of Treating Dementia?

Dementia is an often misunderstood disease, yet global recognition has increased significantly due to the effects of an ageing population on its prevalence. The fact that 'the worldwide number of people with dementia is anticipated to increase from 24.3 million in 2001 to over 81.1 million by 2040' (Ferri et al., 2005, cited in Ames et al. p266) demonstrates the magnitude of the escalation. Dementia is an umbrella term for diseases which cause problems with memory, language, thinking and problem-solving, primarily affecting the elderly population. These signs are only described as dementia 'if these signs continue to get worse, with a permanent deterioration over time' (Andrews 2015: 1). The most common cause of dementia is Alzheimer's Disease, accounting for around 50% of cases, with other variants including vascular dementia and dementia with Lewy Bodies.

The best treatment for dementia has been subject to fierce debate, especially due to the increasing pressure of the dilemma. An effective treatment can be thought of as one which helps maintain the patient's quality of life and mind, helps control symptoms and helps the patients to maintain their independence in life for as long as possible. Two main forms of treatment are at the forefront of the debate: pharmaceutical treatments, and psychological and social approaches. The incurability of the disease shifts the focus of treatment from reversing the disease process to managing symptoms, although the development of new treatment bodes well for the future.

Pharmaceutical interventions are widely used in the treatment of dementia. A vast range of different dementia drugs exist, with the main groups of drugs being cholinesterase inhibitors and antipsychotics.

Cholinesterase inhibitors aim to cease the breakdown of acetylcholine, low levels of which correlate with a worsened recall ability, by stopping the enzyme acetylcholinesterase from functioning correctly (Hughes 2011: 117). Three types - rivastigmine, donepezil and galantamine - are used in the treatment of dementia. Their closely matched efficacies was confirmed in a review of 10 double blind- placebo controlled RCTs which found "no differences in efficacy between [these] study medications' (Birks and Harvey, 2006, cited by Ames et al 2010: 247).

Galantamine, a tertiary alkaloid, is a competitive, reversible inhibitor of acetylcholinesterase. An 'allosteric potentiator of the action of AChE on nicotinic receptors' (Maelicke, 2000, cited in Ames et al. 2010:475), it was first isolated from the bulbs of snowdrop and narcissus but can now be manufactured synthetically(Ames et al. 2010:475). Patients treated with galantamine for a year were able to maintain their memory and cognitive function above the baseline (Jones 2000:49). A 16mg/day dose of galantamine has been linked to 'significant advantages relative to placebo on global assessment, cognitive ability, ADL [Activities of Daily Living] and behavioural disturbance' (Ames et al. 2010:475) - the 4 spheres of cognitive function.

Donepezil is a piperidine-based, non-competitive, reversible inhibitor of cholinesterase. Just 5mg/day can lead to a 64% inhibition of acetylcholinesterase (Jones 2000: 41). Metabolised via the hepatic route it is primarily eliminated through the kidneys. (Ames et al. 2000: 472-3). Donepezil has reported 'modest improvements in cognitive function' and has reduced neuropsychiatric symptoms associated with reduced carer distress in almost 40% of patients' (Jones 2000: 43). A study of patients with very mild dementia reported a 'significant improvement of approximately two points above baseline' on the ADAS-Cog test in those receiving donepezil, compared to a slight drop below baseline in the placebo group (Ames et al. 2010: 473). A different study of 473 patients found that 26% of patients on 10mg/day improved by 7 or more points on the ADAS-Cog, although from the results at the end of a 6-week placebo washout, we can see that the benefits only continue for as long as the drug is taken and has no longer-lasting effects (Jones 2000: 43).

Rivastigmine, with a pheylcarbamate structure, is a slowly reversible, non-competitive inhibitor of both acetylcholinesterase and butyrylcholinesterase. The dual enzyme inhibition 'holds particular promise for patients with moderate and severe dementia' because while the activity of acetylcholinesterase decreases over time, the activity of butyrylcholinesterase either remains unchanged or increases (Perry et al 1978, cited in Ames et al. 2010:474). Rivastigmine as a low risk of interaction with other drugs being taken as it is metabolised independent of the cytochrome p450 liver enzyme system (Ames et al. 2010:474). An ADENA study concerning rivastigmine found that it had 'the largest drug vs. placebo difference that "had been reported to date for a dementia drug" (Corey Bloom J et al. 1998: 55-65, cited in Jones 2000:46)'.

Antipsychotics are drugs used to treat psychoses - 'where the person has lost touch with reality'. They can be used to treat symptoms of dementia, such as hallucinations or delusions (Hughes 2011: 122). Antipsychotics are split into two classes - typical and atypical. Atypical antipsychotics are newer than typical antipsychotics, and are better tolerated by patients.

Typical antipsychotics have consistent but modest effects, and all the drugs in this class have similar efficacies (Wragg and Jeste, 1989; Scheider et al., 1990, cited in Ames et al. 2010:234). A meta-analysis conducted by Lanctot et al. (1998) proved that 'the type and potency of the agent did not influence response'. In addition, the study ' reported an average therapeutic effect (antipsychotic vs. placebo) of 26 per cent, with placebo response rates ranging from 19 to 50 per cent' (Ames et al. 2010:234).

The class of atypical antipsychotics includes olanzapine and risperidone. Studies of olanzapine suggest benefits in treating agitation, but it has been criticised for its potential to cause metabolic syndrome in younger people. A meta-analysis from four studies of risperione (De Deyn et al., 1999; Katz et al., 1999; Brodaty et al., 2003; Mintzer et al., 2004) have shown that the drug significantly reduces agitation and psychosis compared with placebo (Schneider et al., 2006). However, like olanzapine, concerns have been raised about its safety, prompted by the issuing of a warning titled 'Cerebrovascular Adverse Events, Including Stroke, in Elderly Patients with numerically higher rates of peripheral oedema and sedation than with the placebo (Ames et al. 2010: 234).

Memantine belongs to a different class of drugs - it is an NMDA-receptor antagonist which affects glutamate transmission (Hughes 2011:119). It is a 'non-competitive modulator of the NMDA receptor and works by normalising gluamatergic neurotransmission' (Ames et al. 2010:475) - blocking NMDA receptor channels in the resting state, leaving channel on physiological activation during memory formation (Jones 2000: 57). Memantine prevents excitatory amino acid neurotoxicity without affecting the physiological function of glutamate for learning and memory (Butterfield and Pocernich, 2003, cited in Ames et al. 2010:475). In patients with moderate to severe dementia, the use of memantine can lead to significant benefits relative to placebo (Ames et al. 2010:475-6), and doses between 20-30mg/day led to significant improvements in cognitive disturbance, drive and motor functions (Jones 2000: 57). Patients with severe dementia on 10mg/day of memantine experience significant improvement in functioning, care dependence and behavioural symptoms over a period of 12 weeks (Winblad and Poritis, 1999, cited in Jones 2000: 57). However, a large RCT concerning patients with moderate to severe dementia 'failed to demonstrate statistically significant advantages for memantine over placebo on any outcome domain after 24 weeks of treatment' (van Dyck et al, 2007, cited by Ames et al. 2010:476), which calls into question the reliability of the evidence.

The appeal of pharmaceutical interventions in the treatment of dementia is evident, and there are several reasons supporting their use.

Firstly, pharmaceutical treatments is are much cheaper compared to the institutionalisation of dementia sufferers. Expenditure on drug treatments for dementia has been so little compared to social care that in 1992-3, the costs 'were not even reported by the UK NHS Executive' (Jones 2000: 105). In contrast, the cost of social care substantial, with Medicaid spending over $5.7 billion on nursing home residents in America during 1991 (Jones 2000: 105). Furthermore, the annual cost of institutional care for those suffering in dementia in the US is estimated to be at around $40,000 (Jones 2000: 105). The current incurability of dementia means that treatment efforts are focused on improving and sustaining the quality of life for patients, and future developments will be focused on synthesising a cure. Using pharmaceutical treatments as a primary intervention will allow more money to be spent on developing new treatments aimed at reversing the progression of dementia.

Secondly, there is the potential for drugs to be developed which could actually cure the disease. Given 'the increasing understanding of the brain and the pathology of the dementias, we might expect that advances in pharmacological treatment should be just around the corner. Indeed we are expecting to see novel treatments very soon' (Hughes 2011: 124) - such as treatment targeted at the Tau protein. This protein stabilizes microtubules, allowing the transport of vesicles and other products of neuronal cell bodies down the axon to the synapse. In Alzheimer's Disease, the tau protein 'becomes hyper-phosphorylated and this disrupts the microtubules, with the tau to eventually aggregating to form neurofibrillary tangles' (Ames et al. 2010: 485). A trial using a drug derived from the dye used to stain neurofibrillary tangles in neuropathological studies, primarily used inhibit tau aggregation, showed significant benefits over placebo in a study of 321 subjects (Ames et al. 2010: 492). Although there is clear evidence of development, there our knowledge on the progression of the pathology of dementias is incomplete, limiting the development of highly effective drugs. Although advances in treatment will be limited, the rate of technological improvement could fill in the gaps in our knowledge quicker than predicted.

Thirdly, evidence from numerous randomised controlled trials (RCTs) highlight the benefits of the drugs, such improvements in cognitive function and reduced neuropsychiatric symptoms. A pooled analysis including 945 patients, 6-12mg/day of rivastigmine led to cognitive improvements on the ADAS-Cog by at least 4 points in 21% of them, compared to 12% on placebo (Stein K, 1998 cited in Jones 2000:46). Furthermore, in a study of galantamine, 'After 6 months, by comparison with placebo, galantamine can reduce the time carers spend supervising patients by up to two hours a day' (Blesa R 1999, cited in Jones 2000: 50), and 'A recent Cochrane Review (Birks 2006) concluded that there was sufficient evidence to say that when used over a 6-month period the drugs [rivastigmine, galantamine, donepezil] produce small improvements in overall cognitive functioning... as well as in activities of daily living and behaviour' in those with mild to moderate dementia (Downs and Bowers 2008: 157). Despite the small scale of the improvements, the difficulty of treating the disease suggests that any method which disrupts the downward spiral deserves credit.

The benefits of cholinergic agents demonstrate the advantage of drugs. For example, 'As summarised by Cummings (2000), there is evidence that cholinergic agents, especially cholinesterase inhibitors, may have modest clinical relevant psychotropic effects in some patients with dementia' (Ames et al. 2010:247). The inhibitors 'have demonstrated a significant improvement not only in cognitive function and global assessment but also in behaviour... as assessed by the Neuropsychiatric Inventory' (Jones 2000: 79), and the use of donepezil in particular 'indicates a noticeable reduction in the apathy that is a common feature of patients with AD [Alzheimer's Disease]' (Jones 2000: 79). Because of the success of cholinergic agents such as these, it has been suggested that they be considered as 'first line agents in managing behaviour such as apathy, psychosis, agitation and aberrant motor behaviour' (Jones 2000: 79). This is clear evidence that these drugs can lead to better qualities of life for people suffering with dementia, and even though the psychotropic effects are only 'modest' they are still significant enough to make a large difference in people's lives.

However, there are significant drawbacks to the use of drugs in treating dementia.

A big drawback is that the drugs often have numerous side effects which, can cause more distress than relief to patients - a direct contrast to psychological approaches which 'have no adverse events' (Orgeta et al. 2015: 297. The drugs may also cause more serious adverse events, such as antipsychotics which have a number needed to harm (NNH) of around 100, which means that only 100 people need to be treated with antipsychotics to lead to an additional death (Hughes 2011:123). Furthermore, Lonergan et al (2002) recommended that haloperidol, the main antipsychotic, be used only sparingly due to the 'limited efficacy and a high likelihood of toxicity' (Ames et al. 2010: 234). However, this argument is not very strong because the side effects are often mild, transient and do not affect everyone, disappearing a few weeks into starting the drugs or starting a higher dose. This highlights the possibility that the side effects are not a substantial and persisting complication and therefore the fact that they exist should not draw focus from the benefits of the drug.

Secondly, current drug treatments 'are not able to prevent the relentless progression of a neurodegenerative illness such as Alzheimer's disease' and other dementias (Foster 2009:

112), meaning there is no pharmaceutical cure, despite the unpleasant side-effects and therefore it is reasonable to postulate that non-pharmaceutical treatments should be tried prior to any pharmaceutical intervention. Indeed, the National Clinical Guideline in Scotland 'emphasizes that on the basis of available evidence and the problems associated with drugs, non-drug interventions should always be considered before drug treatment is started' (Jones 2000: 76). As long as dementia remains incurable the burden on health services will increase and the pressure to find a cure will follow suit. Estimates from the UK and the USA suggests that 'older patients with dementia comprise between 20% and 25%of people in a typical general hospital (Downs & Bowers 2008: 302), and this proportion will increase exponentially without a cure for dementia due to a rapidly aging global population. Furthermore, the progress of synthesising a drug which can reverse the disease process is hindered as 'there is still much that we do not know' about the disease (Hughes 2011: 124).

A third issue concerns the effect of the focus of producing drugs that alter the disease process. Some patients are unable to tolerate the current drugs used in treating dementia and therefore this restricts the ability of these drugs to have a widespread impact in the field of dementia medicine. Most research and energy by drug companies is put into developing 'treatments that will target the underlying pathology' (Hughes 2011: 116), meaning that less time is spent on attempting to improve the tolerability of existing drugs and therefore the quality of life for patients. This is a big issue in the progress of drug treatments in dementia, because if patients cannot tolerate the drugs then money used to produce them could be seen as inefficient and wasteful.

A fourth disadvantage is the idea of "polypharmacy". The 'cocktail' of drugs taken by many dementia patients necessitates regular drug reviews, which require the patient to repeatedly return to hospital, in order to avoid the development of serious adverse symptoms which could interfere with the patients' daily lives. Indeed, 'in the middle part of the dementia journey blood pressure can fall due to dementia related weight loss and changes in cardiovascular reflexes. Thus, a treatment that was once appropriate may become potentially harmful and, particularly for drugs that are fat-soluble and capable of entering the brain, increase the risk of delirium' (Downs & Bowers 2008: 239). It is imperative that people with dementia are receiving the best treatment possible, and due to further medical problems associated with the disease, treatment must be constantly updated to ensure maximum efficacy. This regular review along with constant changes in prescriptions may be inconvenient to both parties and may subsequently be ignored with drastic repercussions.

Another drawback is that the simple prescription of drugs to treat the psychological symptoms of dementia may not improve the common 'co-existing medical conditions in people with dementia' (Downs & Bowers 2008: 231) such as unhealthy diets, which are more likely to be noticed earlier in social care or therapy sessions than in infrequent doctors appointments. Indeed, 'one prospective study identified 248 other medical problems in 124 of 200 older people with dementia attending an outpatient service' (Larson et al. 1986, cited in Downs & Bowers 2008: 231), underlining the importance of addressing all health issues. Drugs may not be enough on their own, simply due to the complications secondary to dementia, and trying to correct them all with drugs will inevitably lead to a substantially lower quality of life.

Psychological and social approaches are also used in treating dementia. Several different cognitive therapies exist to help those with dementia, and social care can provide continuous care for those unable to manage themselves.

There are a wide range of psychological approaches aimed at reducing the psychiatric symptoms associated with dementia.

One type of therapy is Cognitive Training, which consists of several standardised tasks which focus on specific domains of cognition, including memory, executive functions or attentiveness (Downs & Bowers 2008: 158). The therapy assumes that 'exercising cognitive functions in the selected domain will strengthen performance, either slowing down deterioration or leading to a degree of improvement' (Downs & Bowers 2008: 158). Although some studies have reported significant improvements in the targeted areas, the benefits do not seem to generalise to wider aspects of daily life (Downs & Bowers 2008: 158), and the variability in the way the training is offered makes its efficacy hard to review.

Another therapy used is Cognitive Stimulation. It involves patients engaging in a range of group activities and discussion which are aimed at the general enhancement of cognitive and social functioning (Downs & Bowers 2008: 159). Examples include reality orientation and reminiscence therapies. Reality orientation assumes that impaired orientation handicaps people with dementia, and that using reminders could improve functioning (Ames et al. 2010: 216, Livingston et al. 2005: 1999). A systematic review of reality orientation found evidence of benefits to both cognition and behaviour, and of the significant impact on both cognitive functioning and quality of life (Spector et al 2000a, 2000b, cited in Downs & Bowers 2008: 159), but an RCT found ' no immediate benefit of reality orientation therapy (Hanley et al. 1981)' (Ames et al. 2010: 216). Reminiscence therapy is a group intervention using material from the past to stimulate memory, help create identity and intimacy (Ames et al. 2010: 215), using materials such as old newspapers and household items to 'enable people to share and value their experiences (Livingston et al. 2005: 1997). A systematic review of research on reminiscence by Woods et al. (2005) found 'significant benefits on general behaviour, cognition and mood' (Downs & Bowers 2008: 159).

Another psychological intervention commonly used is Cognitive Rehabilitation, which attempts to optimise the remaining cognitive functioning of people with dementia. This can help them cope with their difficulties, reducing their negative impacts and allowing a patient to live more comfortably with their limitations (Downs & Bowers 2008: 160). The approach is centred on the person's own unique needs, with the programme specifically designed for them, demonstrating the highly personalised nature of this therapy and the ability to identify and work on target areas more easily (Downs & Bowers 2008: 161). This approach fits quite well with the principles of person-centred dementia care, which is a much more personal way of treating the disease.

Music therapy another effective therapy. Presented to individuals or groups, the therapist interacts with the member(s) through singing, eye contact and conversation between songs. Social interaction becomes a very important part of the session, and participants benefit from the social stimulation from others in the group (Ames et al. 2010: 211). 7 small RCTs all found improvements in apathy, agitation or disruptive behaviour during or immediately after the session with no longer term effects (Groene, 1993; Lord and Garner, 1993; Korb, 1997; Clark et al., 1998; Gerdner, 2000; Holmes et al., 2006; Garland et al., 2007) (Ames et al. 2010: 216). Furthermore, there is consistent evidence that music therapy can decrease agitation during sessions and immediately after (Ames et al. 2010: 216).

Social care involves assisting vulnerable people with tasks they may no long no longer able to perform themselves.

Care is often provided to people with dementia by family members. In fact, 'for approximately 75-80% of people with dementia who live in the community, care is provided informally by unpaid carers' (Ames et al. 2010:137). In many countries, the principal objective for social care is to keep people with dementia in their own home for as long as possible (Downs & Bowers 2008: 285), and this seems to be the most appealing option to people (Andrews 2015: 125). Most people with dementia 'are able to live in their own homes for most of their lives, and most care is given by families' (NCCMH 2007, cited in Downs & Bowers 2008: 285). Without these carers, 'those suffering from dementia would have a poorer quality of life and would need institutional care more quickly' (Ames et al. 2010:137). Surprisingly, 'People living with dementia at home alone are 20 times likely to move into residential or nursing care than those living with a family member' (Banerjee et al. 2003, cited in Downs & Bowers 2008: 287), which emphasises the importance of family carers to dementia patients. The benefit of family carers is evidenced by numerous RCTs. One RCT, with 144 people, compared a group intervention to treatment as usual. The difference in neuropsychiatric symptoms at 16 weeks approached significance (Herbert et al. 2003, cited in Ames et al. 2010:215). Unfortunately, being a carer can take its toll. Family carers who live with the person with dementia often describe greater difficulty than those who live elsewhere (Downs & Bowers 2008: 288), causing potential problems for both the sufferer and the carer.

If the burden for the family carer becomes too overwhelming, the next option is usually a care home. There is a substantial number of people with dementia living in all types of care home (Downs & Bowers 2008: 336), with the prevalence of dementia in long-term care facilities estimated to be at around 62% in the UK (Matthews and Dening, 2002, cited in Ames et al. 2010: 266). Care homes have professionally trained staff who are well equipped to take care of people with dementia. Good care homes can provide them with excellent environments, because it is thought that the most agitated behaviours of people with dementia are manifestations of unmet needs (Camp et al., 2002), and this can lead to demoralisation and possibly depression. In care homes, higher levels of mastery and greater satisfaction with available social support have been shown to lessen depression and buffer the adverse impact of disability (Jang et al., 2002, cited in Ames et al. 2010: 270), and a review of 18 studies of psychotherapy provided in long-term-care settings by showed that the majority had benefits on depression, hopelessness, self esteem and perceived control (Bharucha et al. 2006, cited in Ames et al. 2010: 271).

Another method of social care is known as Care Management - a blend of care institutions and family carers. An example is the Lewisham Case Management Scheme, which offered a practical demonstration of care management providing community support to older people with dementia living at home (Challis et al, 2009, cited by Ames et al. 2010: 182). The goal of this scheme was 'to provide effective integrated community-based long-term care spanning the health and social service interface' (Ames et al. 2010: 182). Positive effects began to show in its second year, where the rate of admission to care homes for older people in the experimental group was lower than under standard arrangements for those in the control group (Ames et al. 2010: 182). This scheme proved that it is possible for dementia patients to live in their own homes without family members, and even though it was apparent that the older people in both groups were receiving support from a relatively resource-rich community based old age psychiatry service' (Ames et al. 2010: 183), the results are still applicable to various other communities.

There are several advantages to using psychological and social approaches to help people cope with dementia.

One advantage of social care is that it is much more personal and can provide people with dementia with the support they need. People living with dementia at home alone are 20 times more likely to end up in residential or nursing care than those with a family member (Downs & Bowers 2008: 287), which demonstrates how significant a positive impact it can have on the person with dementia. In the modern world, rapid advances in medicine have led to the intent focus on curing all diseases, and because of this it is easy to forget that sometimes moral support for sufferers can be just as effective.

Furthermore, if performed correctly, social care can create a positive, exciting environment which could breathe life into disengaged patients and improve their wellbeing. For example, as a result of an 'experiment' by Bill Thomas involving placing several animals into a care home, 'Even residents with dementia so severe that they had lost the ability to grasp much of what was going on could experience a life with greater meaning and pleasure and satisfaction' (Gawande 2014: 125). However, although this is a very promising example, most care homes seem to overlook elderly patients' desire for a life not solely about safety. Their view is narrow and this negatively impacts the quality of life for these patients.

The advantage of psychological approaches is evident from the various studies conducted, which suggest that psychological interventions can improve various medical issues commonly found alongside dementia. For example, results from a meta-analysis including 439 participants studying the effects of psychological treatment on depression 'significantly favoured psychological treatment in reducing depressive symptoms', with little heterogeneity between studies (Orgeta et al: 295). Furthermore, particular examples of psychotherapy such as cognitive behavioural therapy have demonstrated some success in alleviating anxiety and depression in people with dementia (Downs & Bowers 2008: 252). However, the evidence from these studies is not as strong as it should be - especially compared to the evidence supporting drug treatments. It is important to remember, however, that a lack of evidence does not equal a lack of efficacy (Hughes 2011: 113).

Another advantage is that the patients may enjoy the sessions, such as music therapy, much more than they would enjoy taking the drug treatment. Therefore, although the positive effects may not be as prolonged or significant as using drugs, the entertainment and excitement it provides for the people with dementia at that time may be more beneficial to them than we realise. For example, 6 small trials on music therapy 'showed improvements in disruptive behaviour' (Livingston et al. 2005: 2007). Being diagnosed with dementia can create a life devoid of joy because they see it as a life sentence. Seeing as no treatments can cure dementia it makes sense to try and restore their will to live by providing something engaging.

However, there are flaws with both social and psychological approaches.

Firstly, in social care the mantra of 'safety first' has become overly important and people with dementia living in care homes or receiving help from care groups may lose the chance to do things they previously liked. Downs & Bowers (2008) write that 'It has been suggested that the way people are treated (Sabat 1994) can result in behavioural and emotional difficulties, increasing their degree of disability. Staff often take over tasks that individuals are still capable of engaging with because of the focus on efficiency' (Downs & Bowers 2008: 347). Carers have therefore been encouraged to move being the simple custodial approach to caring (Ames et al 2010: 271). It is important that even dementia patients retain some sense of autonomy and independence, otherwise they may feel helpless and become increasingly dependent on care staff and family members, increasing the carer burden.

Secondly, people in social care may feel that they've lost their individuality and that they have no say in how the rest of their lives play out. In social care there is a risk that those in care feel like 'cogs in a large machine they do not control'. Allowing people to stick to their routines is an easy way of providing individualised care (Downs & Bowers 2008: 173). Unfortunately, this is an issue which many institutions seem to ignore.

Thirdly, people with dementia will feel uncomfortable in and withdrawn from their new environment in a long-term care facility, and may have difficulty adjusting because of a lack of interest by care homes about personal enjoyment. It is said that 'the problem with medicine and the institutions it has spawned for the sick and the old is not that they have an incorrect view on what makes life significant. The problem is that they have had almost no view at all' and fail to realise that 'we seek a life of worth and purpose' (Gawande 2014: 128). This is one of the biggest issues with the way modern medicine cares for the elderly, and one of the reasons why many elderly people resist institutionalisation. A safety-first outlook on life is essentially a life with no purpose and this is what needs addressing in care homes.

Concerning psychological interventions, it can be said that therapists are focusing on the wrong areas. This is because "Progressive cognitive impairment is, after all, an inevitable consequence of having dementia. Trying to hold it back could be likened to King Canute trying to hold back the tide" (Downs & Bowers 2008: 164). Furthermore, interventions that concentrate on cognitive functioning may be perceived as forcing the person to face their deficits, potentially putting them into embarrassing or shameful positions that expose their vulnerability (Downs & Bowers 2008: 164). However, if the session is conducted in a way that eases the patient into it the patient should not feel uncomfortable. Furthermore, just because it is inevitable does not mean that we should not try anything to slow the progression.

Another disadvantage of psychological therapy is that it is a very delicate approach which must be undertaken in the right way to have any sort of positive effect. An insensitive attempt to introduce cognitive interventions may induce distress and defensiveness. No-one wants to see people with dementia brutally corrected whenever they voice their confusion (Downs & Bowers 2008: 164), but unfortunately this is sometimes the case and is counterproductive in terms of the aim of relaxing the patient.

Another disadvantage of using psychological interventions is that the need to make sure that psychological interventions are custom-made for patients' needs is often overlooked, making any progression in these types of treatments unlikely. We are 'in danger of assuming that because we have an emerging evidence base for the effectiveness of psychological approaches... that we should apply this approach to all people with dementia. However such approaches should be individualized and tailored to address each person's unique concerns and circumstances'(Downs & Bowers 2008: 258-9). Therapies specifically designed for people's needs will be much more effective than generic ones which may not fully target the areas in which people are weakest.

CONCLUSION

In conclusion, there is a strong case for both the use of psychological and social approaches, and the use of drug treatments, in treating dementia. Psychological and social approaches can be seen as superior in many respects. Interventions such as cognitive stimulation therapy circumvent the issue of rather unpleasant side effects including diarrhoea and dizziness while also improving cognitive function in dementia patients. Furthermore, using psychological interventions instead of drug treatments negates the need of patients being on multiple pharmaceutical treatments at once and therefore subject to frequent incontinent check-ups with their doctors. Social care has the potential to rekindle enjoyment and excitement in people with dementia by providing them with ways to engage in activities, which, when suffering from an incurable disease which often leads to depression, is arguably more important than trying to treat the disease with drugs which cannot reverse the damage. Even considering the situations in which social care can potentially neglect the independence and freedom coveted by its residents with dementia, and psychological therapies may force patients to come to terms with their limitations in an uncomfortable settings, the proven benefits of both methods, especially when used in conjunction, makes them effective and worthwhile treatments.

Drug treatments, on the other hand, have marked advantages over social and psychological approaches. The effectiveness of the cholinesterase inhibitors and the potential for further development in drug treatments and the significance of the improvements they can cause all support the use of pharmaceutical treatments as a primary intervention. Furthermore the towering costs of social care over the money spent on the development of drugs proves that drugs are much more cost effective than creating institutions to take care of dementia patients. The fact that drug treatments can be more effective at maintaining sufferer autonomy than social care is an important consideration. However, the issue of polypharmacy increases the risk of people with dementia forgetting to take the medication, and the risks posed by anti-psychotic medication promote thoughts of caution when turning to drug treatments

Overall, although it is difficult to ignore the case against psychological and social approaches, the fact that similar improvement rates have been seen through these compared to drugs, considering the side effects that drugs can produce and bearing in mind that presently there are no cures for dementia, psychological and social approaches seem to be the most effective way of treating patients with dementia while maintaining their quality of life. The future looks promising in terms of the development of drugs that have the potential to reverse the disease progress, but until then the use of drugs should be focused on research purposes with the main treatment coming from therapy and social care.

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SOURCE EVALUATION

Being Mortal, by Atul Gawande

The book is published by Profile Books Ltd in association with the Wellcome Collection. As a result, it is unlikely to be unreliable, as the Wellcome collection is a renowned institution and would therefore only support authors who knew about the material and had researched it well. It is written by a doctor, Atul Gawande, who has published several critically acclaimed books on similar topics. Although the book does not contain thorough referencing in the case of footnotes, it gives a list of sources at the end of the book in a section called 'Notes on Sources', which seem quite reliable. Overall, this book seems to be a reliable resource due to the reputation of both the author and the publisher, and likely contains minimal factual errors, and therefore I used information from this book in my written report.

Alzheimer's and Other Dementias, by Julian Hughes

This book is published by Oxford University Press. This is a very high-profile publisher known for the high quality of factual information that its books contain, and therefore all the information in this book is likely to be factually correct and therefore reliable. The author is a consultant in old age psychiatry and is therefore very knowledgeable in the area he is writing about. The referencing in this book is quite thorough, with references being made both in the main body of the text and in a detailed appendix at the end of the book. The author appears to have consulted many sources, which look reliable, and this increases the reliability of the information in the book. Overall, for these reasons this book seems quite reliable and therefore I regularly referred to it while writing my report.

Excellence in Dementia Care: Research into Practice by Murna Downs and Barbara Bowers

The book is published by Open University Press through McGraw-Hill Education. Therefore this book is an educational book as the publisher publishes books for educational purposes. This means that the book is likely to be reliable because the publisher would not permit authors to release falsified information, or information sourced from poor resources. The editors are Murna Downs and Barbara Bowers, both expert in their field, and the book was written using information from several expert contributors, making the book a very reliable resource. There is thorough referencing throughout the book, with a Harvard Referencing style and a list of references at the end of each chapter. Overall this book is very reliable due to the high-quality referencing and the reputability of the contributors, and for these reasons I frequently used material from it in my written report.

Dementia Fourth Edition, edited by David Ames, Alistair Burns and John O'Brien

This is an academic book is published by Hodder Arnold, who focus on publishing academic pieces of work. The reputation of the publisher suggests that the source is reliable because the publisher would only allow high quality writing to be published in order to maintain its credibility. The resource has an extensive list of highly credible contributors, and the editors themselves are experts in the field. These help to ensure the reliability of the resource as the writers have substantial knowledge on the subject and will therefore the information in the book is likely to be very factual. The referencing in the book is extensive and thorough, with lists of references at the end of each chapter. The extent of the referencing is a demonstration of the breadth of sources consulted in the production of this book, increasing the likelihood of it being reliable. Overall due to the mentioned reasons I decided the book was more than reliable enough to use as a primary resource, and therefore I have used substantial amounts of information from this book.

Psychological treatments for depression and anxiety in dementia and mild cognitive impairment: systematic review and meta-analysis by Vasiliki Prggeta, Afifa Qazi, Aimee Spector and Martin Orrell

This is an academic article published in the British Journal of Psychiatry. This is an academic journal so the article is likely to be reliable because they would only allow authors to publish their work in the journal if it was of a high quality, with all information contained within it being factually correct. The article was written by 4 contributors, all of whom are experts in their fields. Therefore the article is likely to be reliable because the contributors have sound subject knowledge. The referencing is thorough, with a list of references at the end of an article, each linked to a specific section. Overall this article is quite reliable for these reasons and therefore I used material from it. However, because most if it was study-based I had no need to use very much information, which is why it was not used as much as the others.

Drug Treatments in Dementia by Roy Jones

This is an academic book published by Blackwell Sciences Ltd. This suggests that the resource is likely to be reliable because the publisher is known for its scientific books, and therefore it would only allow scientific material to be published if it was of a high standard and contained reliable information. The book was written by Roy Jones, an honorary consultant geriatrician working in The Research Institution for the Care of the Elderly. This shows that the author was very knowledgeable in the area he was writing in, increasing the reliability if the information in the book. The book has very thorough referencing made throughout the text, with lists of references at the end of each chapter. Overall this book is very reliable and therefore I drew material from it regularly when writing my report.

Dementia: The One-Stop Guide by June Adams

This book is published by Profile Books Ltd. This suggests that the resource is likely to be reliable because the publisher is well known and therefore would not risk its reputation by allowing authors to publish factually incorrect books. The book was written by June Andrews, who is an expert in the field. This adds to the reliability of the book. However, the book is not well referenced, which reduces the reliability of the book slightly. This, and the fact that the book appears to be more of an informative guide for family carers rather than an academic book about treatments, is why I decided against using this book extensively in my report.

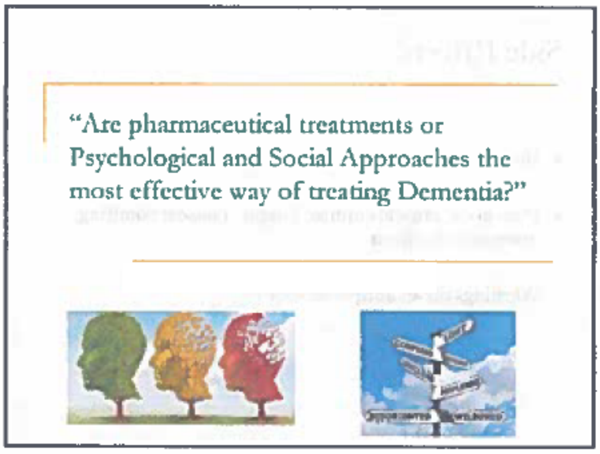
Systematic Review of Psychological Approaches to the Management of Neuropsychiatric Symptoms of Dementia by Gill Livingston, Kate Johnston, Cornelius Katona, Joni Paton and Constantine G. Lyketsos

This is an academic article published in the American of Psychiatry. This is an academic journal so the article is likely to be reliable because they would only allow work to be published if it was of a high quality, with all information contained within it being factually correct. The article was written by 5 contributors, all of whom are experts in their fields. Therefore the article is likely to be reliable because the contributors have sound subject knowledge. The referencing is thorough, with a list of references at the end of an article, each linked to a specific section. Overall this article is quite reliable for these reasons. However, like the other article I did not use it a huge amount due to the fact that it was mostly research focused with many studies reporting the same thing, and therefore I did not need to use more than one study.

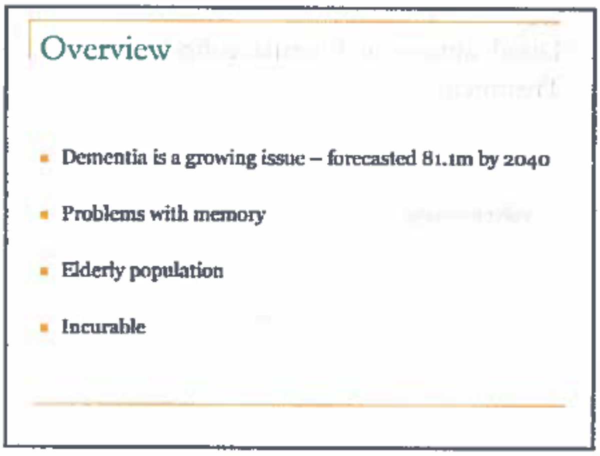
Memory: A Very Short Introduction by Jonathan K. Foster

this book is published by the Oxford University Press. Therefore the book is likely to be very reliable as the publisher has a high reputation to uphold and would therefore not put it in jeopardy by publishing sub-par pieces of work. This book is part of a whole series of books, known as Very Short Introductions. The series is well known and therefore the book is likely to be reliable because the series has a regulation to maintain. However, the referencing is lacking which impacts the reliability. The author is a clinical professor and is therefore an expert in the field, which makes it likely that the content in the book is reliable. Overall, the book is quite reliable, but I did not use it simply because there was not enough material specifically on dementia and therefore it was of limited use.

The presentation consists of a large number of slides. It is unlikely that so many slides could be used in a presentation limited to 10 minutes.

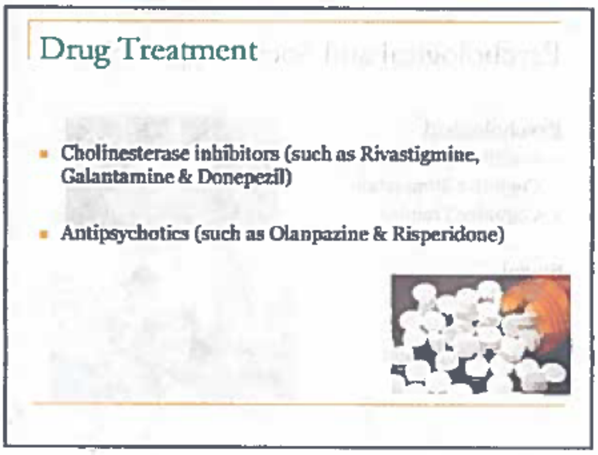


"Are pharmaceutical treatments or Psychological and Social Approaches the most effective way of treating Dementia?"



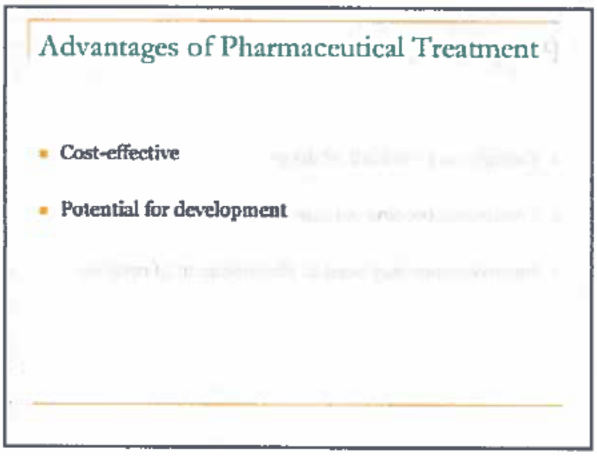
Overview

- Dementia is a growing issue – forecasted 81.1m by 2040
- Problems with memory
- Elderly population
- Incurable



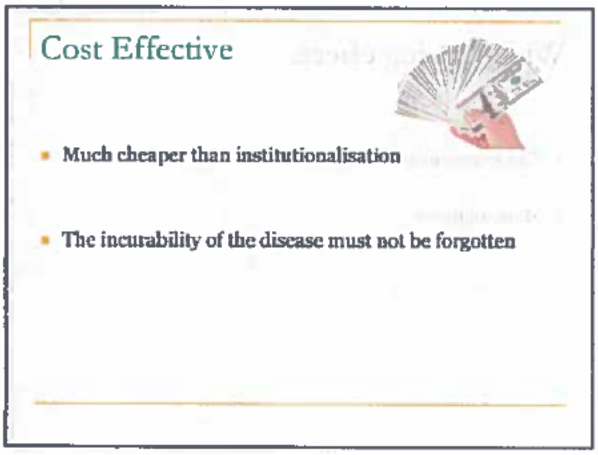
Drug Treatment

- Cholinesterase inhibitors (such as Rivastigmine, Galantamine & Donepezil)
- Antipsychotics (such as Olanpazine & Risperidone)



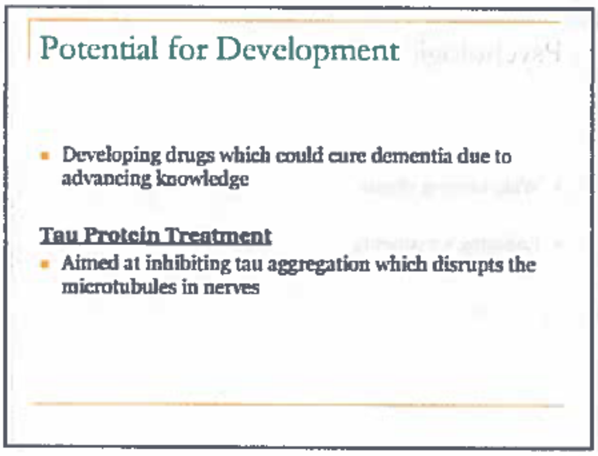
Advantages of Pharmaceutical Treatment

- Cost-effective
- Potential for development



Cost Effective

- Much cheaper than institutionalisation
- The incurability of the disease must not be forgotten



Potential for Development

- Developing drugs which could cure dementia due to advancing knowledge

Tau Protein Treatment

- Aimed at inhibiting tau aggregation which disrupts the microtubules in nerves

Disadvantages of Pharmaceutical Treatment

- Side effects
- "Polypharmacy"

Side Effects

- Inconvenience for patient
- Diarrhoea; muscle cramps; fatigue; nausea; vomiting; insomnia; dizziness
- Warnings about antipsychotics

Polypharmacy

- Patients on a 'cocktail' of drugs
- Treatments become outdated
- Inconvenience may need to abandonment of reviews

Psychological and Social Approaches

Psychological

- Cognitive Rehabilitation
- Cognitive Stimulation
- Cognitive Training

Social

- Family Carers
- Care Home
- Care Management

Psychological: For

- Wide-ranging effects
- Engaging for patients

Wide-ranging effects

- Can improve other medical issues
- Meta-analyses

Engaging

- Enjoyable for the patients
- Eg social interaction in Music therapy – showed improvements in disruptive behaviour

Psychological: Against

- Lack of personalisation and sensitivity

Lack of personalisation and sensitivity

- May force the person with dementia to face their fears – embarrassment or shame
- Therapy is delicate and must be done carefully
- Custom-made, individualised therapies are necessary for the best outcome

Social: For

- More Personal contact and support

More personal contact and support

- Moral support for people with dementia in person
- Positive environment that can breathe life into patients
  E.g. Bill Thomas' experiment in care homes

Social: Against

- Overemphasis on Safety

Overemphasis on Safety

- Safety-first mantra
- Can lead to emotional and behavioural difficulties

Conclusion

Pharmaceutical	**Psychological and Social**
Cost	Avoids side effects
Possible developments	Engaging activities

EPQ Journey

- How I chose my title
- Why I chose this topic/Aims and objectives
- Choosing resources
- Making use of resources
- Writing the report
- Performance – Successes and failures
- Lessons learnt
- What I would do differently
- Impact of EPQ on future education

How I chose my title

- Must be medical-related topic

Initial Ideas
- Effect on NHS of dementia
- Blood Disorders

- Narrowing the title

Why I chose this topic/Aims and objectives

Why?
- Topic with lots of debate
- A topic relevant to the present day

Aims
- Example of relevant Above and Beyond Work for medicine
- Introduction to the type of work completed at university
- Learn skills required at university

Choosing resources

- Looked online for introductory resources
- Local libraries e.g. Sutton
- University libraries e.g. UCL library
- References inside resources are a good way to find new ones

- Important to start looking early

Making use of resources

- Research questions
- Made concise notes on each research question using all relevant resources
- Realised some were less useful than others – found new resources to replace them

Writing my report

- Make a detailed plan first
- Must be concise

Successes

- Well-chosen research questions
- Note taking was clear
- Detailed plan
- Generally planned my time well

Failures

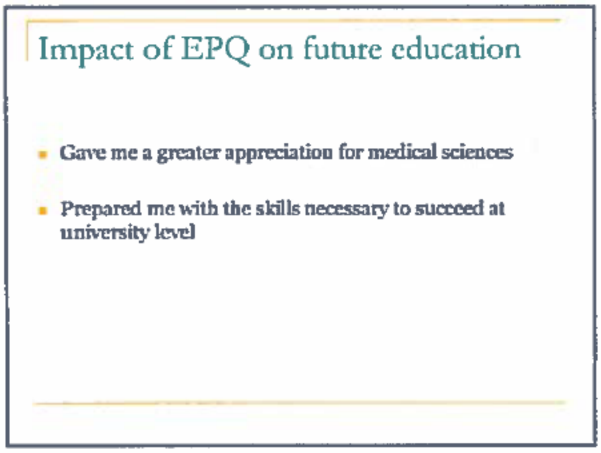
- Ambitious planning for before the Easter Holiday
- Some of the early resources I obtained were not as relevant as I thought they would be
- Overestimating the available time over the summer for EPQ

End Product - What I learned

- Time management
- Efficient reading and note taking
- Evaluating the reliability of sources
- The importance of thorough planning
- Leaving time to check

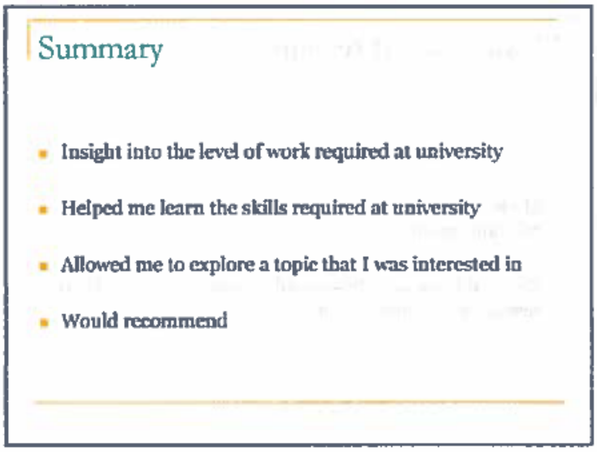
What would I do differently

- External commitments
- Acquisition of sources



Impact of EPQ on future education

- Gave me a greater appreciation for medical sciences
- Prepared me with the skills necessary to succeed at university level



Summary

- Insight into the level of work required at university
- Helped me learn the skills required at university
- Allowed me to explore a topic that I was interested in
- Would recommend

GLOSSARY FOR EPQ PRESENTATION

Pharmaceutical treatment - treatment involving the use of drugs

Psychological treatment - treatment involving a psychiatrist in an effort to treat mental illnesses

Cholinesterase inhibitors - Drugs which aim to cease the breakdown of acetylcholine (a protein) by inhibiting the enzyme cholinesterase from functioning correctly. This relies on the fact that low levels of acetylcholine are correlated to a worsened ability to recall information

Aggregation - when the protein lumps together

Tau protein - The name of a protein which is essential in stabilising nerves

Hyperphosphorylation - when a compound contains the maximum amount of phosphate groups (small charged molecules containing the elements phosphorus and oxygen) possible

Number Needed to Harm (NNH) - the number of people needed to be treated with a certain drug in order for it to result in an additional death

Polypharmacy - the idea of patients being on many different drugs

Adverse - unintended and harmful, preventing success or development

Cognition - the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses

Cognitive Stimulation - involves patients engaging in a range of group activities and discussion which are aimed at the general enhancement of cognitive and social functioning

Cognitive Training - consists of several standardised tasks which focus on specific domains of cognition, on the assumption that exercising cognitive functions in the selected domain will strengthen performance, either slowing down deterioration or leading to a degree of improvement

Cognitive Rehabilitation - attempts to optimise the remaining cognitive functioning of people with dementia, helping them cope with their difficulties and allowing a patient to live more comfortably with their limitations

Care management - an intermediate between care homes and family carers

Meta-analysis - when data is combined from several studies to reach a conclusion with more statistical power

2 - Overview

- 24.3m in 2001 – 81.1m by 2040
- Memory, language, thinking & problem solving
- **Incurable** – due to lack of knowledge

3 - Pharmaceutical

- **CIs** – try to stop the breakdown of a protein by inhibiting the enzyme responsible, on the basis that low levels correlate with a worsened recall ability
- **APs** – used to treat psychoses' (losing touch with reality) eg delusions;

5 - Cost-Effective

- **Incurability** – The money saved from using drug treatments over institutionalisation could be devoted to research into finding a cure
- **Cost** - so comparatively cheap that costs were not reported by the **UK** NHS Executive in 1992-3; 1991, America – Medicaid spent over $5.7bn

6 - Potential for Development

- Alter disease process due to advances in science and tech
- **Tau** – stabilises nerves; AD = clump together
- **Aggregation** = lumping together (in AD); stops hyperphosphorylation

8 - Side Effects

- Distress > relief in some cases
- **Antipsychotics** which have a number needed to harm (NNH) of around 100 - very high considering the significant number of people with dementia already

9 - Polypharmacy

- Requires regular drug reviews in order to avoid the development of serious adverse symptoms – inconvenient
- A treatment that was once appropriate may become potentially harmful
- Patients begin avoiding reviews -> no further treatment, deterioration is accelerated

1[illegible] Psychological and Social Approaches

- **Music therapy**
- **Family Carers** – for 75-80% living at home; goal in many countries - keep them out of there - 'those suffering from dementia would have a poorer quality of life and would need institutional care more quickly
- **Care Home** – 62% estimate prevalence; agitation stems from unmet needs
- **Care Management** – hybrid; E.g. Lewisham Care management scheme 'to provide effective integrated community-based long-term care spanning the health and social service interface'

12 - Wide-ranging effects

- **Other medical issues** – commonly found alongside dementia eg anxiety and depression
- **Meta-analysis** – results from a meta-analysis including 439 participants studying the effects of psychological treatment on depression showed it had significant benefits in reducing depressive symptoms' – important for maintaining QoL

17 Engaging

- Enjoyment may be more important than we realise despite effects not being as prolonged as drug treatments because dementia can be a lonely time and having that interaction

15 - Lack of Personalisation and Sensitivity

- Insensitivity may induce distress and defensiveness
- **Custom** – otherwise less effective; don't assume that each therapy will work for everyone just because there is evidence supporting it

17 - More Personal Contact and Support

- Due to the intent focus on curing all diseases we can forget that moral support can be just as important for them, eg:
- People with dementia living at home alone are 20 times more likely to end up in residential/nursing care than those with family members
- **Animals in care homes** – dogs, birds, cats - gave patients with even the most severe dementia a life with greater pleasure and satisfaction

19 - Overemphasis on Safety

- **Safety First mantra** - can prevent people with dementia from doing things they want – also happens because staff often take over due to a focus on efficiency. Things out of PWD's control
- **Way they're treated can lead to E&B difficulties** – may become withdrawn and uncomfortable due to lack of familiarity; can increase their degree of disability

20 - Conclusion

- **Cost** – allows for future developments
- **Less side effects** hence less inconvenience to patients

22 - How I chose my title

- **Narrowing** – evaluative, specific, comparative - focused report

23 - Why I chose this topic/Aims and objectives

- **Debate** – enough material on both sides of argument
- **Relevant** – growing issue
- **AAB** – important – shows interest by willingness to go above curriculum
- **Work at Uni** – much more independent work; EPQ is a step in that direction
- **Skills** – efficient note-taking and reading; time management etc

24 - Choosing resources

- Choice in degree-level resources essential for a well balanced project
- **Balance** – Material on both sides
- **Early** – change them if necessary

25 Making use of resources

- **Research questions** – set yourself for more focused note-taking; more efficient
- **Relevance** – no point using irrelevant resources – waste of time

26 - Writing my report

- **Plan** – All the info in 1 place – makes writing more straightforward
- **Concise** – any parts not adding to your argument should not be in the report

27 - Successes

- **Time** – helped prevent too much stress

28 - Failures

- **Ambitious** – tried to do too much; didn't acknowledge other commitments
- **Relevance** – spent extra time looking for other resources
- **Overestimation** – Other commitments

2 End Product - What I learned

- **TM** – sustained commitment; good organisation is key for avoiding last-minute worl
- **Efficiency** – b/c so much work
- **Evaluation** – author; publisher; referencing
- **Planning** – done before summer – takes pressure off summer with a detailed plan

– just translation, no more research

- **Check** – errors, improvements, etc

30 - What would I do differently

Take more time to factor in external commitments into time plan

- **Commitments** – WE, PS
- Sources – to leave myself more time to replace them if necessary

31 - Impact of EPQ on future education

- **Appreciation** – and how important medical treatments are in our lives
- Skills – good work ethic

32 - Summary

Good opportunity

- ~~**Appreciation** – and how important medical treatments are in our~~ lives