



Degenerative Dementias and Their Medical Care in the Movies

Kurt Segers, MD*†

Abstract: Compared with other neurologic problems, few films have been dedicated to degenerative dementia. To our knowledge, this is the first systematic review about the way in which dementia patients and their medical care are described in films. Twenty-four of the 53 relevant films that were found in online movie databases could be viewed. The author describes the demographics of the characters suffering from dementia, the clinical picture including neuropsychiatric manifestations, diagnostic procedures, medical follow-up, pharmacologic and nonpharmacologic treatment and the attitude of the caregivers. Most characters are played by actors in their seventh or eighth decade. There is an overrepresentation of highly educated people. Although the clinical picture is often accurate, some films suggest that even in the late stages of the disease patients have sudden moments of full insight in their disease. Among the neuropsychiatric signs, activity disturbances and aggressiveness are most often described. Few patients seek medical help, only 2 patients take acetylcholinesterase inhibitors and follow-up is absent for 5 of the 11 relevant patients. Only in 10 of 23 films, the term “Alzheimer” is used. Although there is a growing cinematographic interest in Alzheimer patients, even recent films tend to reinforce therapeutic and even diagnostic nihilism.

Key Words: Alzheimer disease, dementia, fiction films, therapeutic nihilism

(*Alzheimer Dis Assoc Disord* 2006;00:000–000)

The demographic structure of the human population is dramatically changing. The rapid increase of the number of aged individuals is not limited to the Western countries and the World Health Organization expects that by 2025 about 823 million people will be older than 65.¹ As degenerative dementias are age-related conditions, this global ageing is likely to be reflected in a rapid increase of their prevalence too. The latter will not only

have a tremendous socio-economic impact, but it will probably also have further consequences that might change all aspects of our society, including popular culture.

Television and cinema have an important influence on how the general public sees diseases and patients. In the industrialized countries, people spend about 3 hours a day, or half of their leisure time, watching television.² Fiction confronts the audience with health problems like suicide, alcoholism, or psychiatric illnesses. The impact of fiction films should not be underestimated: although most individuals with autism manifest moderate mental retardation, Dustin Hoffman’s character Raymond Babbitt in “Rain Man” (1988) has left a persistent image in our collective consciousness of the autistic patient as a kind of *idiot savant*.

With their profound interference with normal functioning, neurologic conditions have always been popular in movies, especially coma³ and pure memory loss.⁴ Dementia, on the contrary, has only seldom been the subject of films, probably because it affects mainly elderly people and the bad prognosis is not likely to generate cheerful films with happy endings. In a personal communication Vickie Patik, the writer of “Do You Remember Love?,” which might be the first film in which the term “Alzheimer disease (AD)” was coined, mentioned that the network CBS initially refused financing the film because “no one would want to watch a film about something as depressing as Alzheimer’s.”

As a consequence, there is almost no medical literature about dementia in fiction. Dastoor⁵ reviewed 4 films and 1 documentary, all from before 1988.

To the author’s knowledge, this is the first systematic review of the depiction of dementia patients and their medical care in fiction films.

METHODS

Fiction films, TV films, or shorts released before 2005 and dealing with a main character suffering from a degenerative dementia were searched using IMDb Pro, the professional version of the Internet Movie Database (<http://www.pro.imdb.com>), a commercial online database containing 373,164 relevant titles from 1888 to 2004. Using the Advanced Search option, title queries were done searching the words “Alzheimer,” “dementia,” “memory loss,” and “senile” in the titles, keywords, and plot outlines. Plot outlines were screened on their relevance. Additional films were found using the same

Received for publication September 6, 2006; accepted November 2, 2006.

From the *Memory clinic of the Department of Neurology; and †Memory clinic of the Day Care Hospital of the Geriatric Department, Brugmann University Hospital, Brussels, Belgium.

There were no sources of financial support.

Disclosure: The author has reported no conflicts of interest.

Reprints: Kurt Segers, MD, Neurology Department, CHU Brugmann, Place A. Van Gehuchten 4, 1020 Brussels, Belgium (e-mail: kurt.segers@chu-brugmann.be).

Copyright © 2006 by Lippincott Williams & Wilkins

TABLE 1. Neuropsychiatric Manifestations in 25 Characters, Grouped in the Main Domains of the First Part of the BEHAVE-AD

Symptomatology	No. Patients (%)
Activity disturbances	14 (56)
Aggressiveness	12 (48)
Affective disturbance	9 (36)
Delusions	9 (36)
Anxiety and phobias	3 (12)
Diurnal rhythm disturbances	3 (12)
Hallucinations	0 (0)

searches in a similar database (www.allmovie.com) and with the search engine Copernic (www.copernic.com) or were suggested by Dr Anne Clara, a Belgian expert in films about psychiatric illnesses. For 26 of the 55 titles that were eventually retained, a copy of the movie could be purchased or was kindly sent by its makers. After viewing them, 2 films were excluded because the character in focus appeared not to suffer from degenerative dementia. (For a list of the included films, see Appendix A.) For each screened film, the country of origin and date of release was retrieved from the IMDb Pro database. For each character suffering from probable degenerative dementia, the name, age, sex, marital status, domestic situation (home alone, with a family member, or institutionalized) was noted. If the age of the character was not explicitly stated, the age of the actors impersonating the characters at the release date of the film was retrieved through IMDb Pro or by contacting the director. The presence of professional help at home, medical follow-up, and the use of medication were noted. Overall functioning was scored using the Global Deterioration Scale (GDS). Behavioral abnormalities were scored with the first part of the BEHAVE-AD. The most important properties of the relation between the patient and his or her caregivers were noted.

The GDS is a validated 7-point scale based on the description of 7 clinical stages, ranging from 1 to 7 or from the absence of abnormal cognitive manifestations to very severe dementia.⁶ There is a highly significant correlation with the Mini-Mental State Examination and other neuropsychologic tests and it has a high interrater and test-retest reliability. The first part of the BEHAVE-AD is a rating scale covering 25 items in 7 domains of behavioral symptoms of AD (Table 1).⁷

RESULTS

Films

Twenty-four films were viewed, of which 4 were short films and 2 were TV films. Seventy-five percent were American productions or coproductions. Release dates ranged from 1970 to 2004.

Demographics

Most characters with degenerative dementia are played by actors in their seventh or eighth decade, with

the exception of the short “Diagnosis” in which a young girl tells she has been diagnosed with Lewy body disease, although she has no physical signs of the illness. Two-third of the characters are women. About 80% live at home, the rest of them being institutionalized. The role of the latter is often limited to lying in bed, as in “Agnes of God” or “Noel,” probably to stress the importance of the various psychologic problems of their children. In the oldest movie, the black comedy “Where’s Poppa?,” institutionalization is still such a taboo that Gordon, the son of the patient, starts stuttering each time he tries to pronounce the word “home.”

Only one character, the professional killer Ledda in “The Alzheimer Affair” still has a highly active professional life, although he is aware of his illness and thinks about retiring. Characters which had to end their professional career are mostly men and tend to have a very high educational level: 4 of the 10 professionals are university professors, the others being often medical doctors or creative artists.

Clinical Picture

Few screenwriters seem to have difficulties in depicting adequately the typical semantic memory deficit and the difficulties with retrieving recently learned information. One character in “Folks!” sums it up nicely: “1943 he remembers like yesterday. It’s yesterday he can’t remember like yesterday.” Still, there are some exceptions:

- The cognitive profile of Allie in “The Notebook” is not very convincing. Because she cannot remember even the main events of her own life anymore, her husband Noah reads her every day from her own autobiography. Although Allie does not recognize her own husband and children anymore, she does not seem to have difficulties with following the plotline of the story that Noah has been telling her over the course of several days. In the resolving scene at the end of the film, she suddenly realizes that she and her husband are the main characters in this love story. As she recognizes her husband this is followed by a brief moment of lucidity and profound insight in her disease process.
- In the slapstick comedy “Folks!,” Harold Aldrich, who has been completely unaware of the catastrophes he seems to invoke on his son, has a similar unique and unrealistic moment of complete lucidity and insight in which he proposes to commit suicide and to make it look like an accident to collect the life insurance of himself and his wife.
- The clinical picture of Mr Stein in “Speed of Life” is hallmarked by a subcortical dementia with slowing of thoughts, cerebellar ataxia, and epileptic insults, which makes the diagnosis of AD improbable. Not surprisingly, his doctor tells his son that there is probably something else going on. According to the author and director Robert Schmidt in a personal communication, the character of Mr Stein was based on his own father, who during his life was suspected having AD but there were no typical signs of Alzheimer’s

1 pathology on brain autopsy, which rather suggested a
2 form of encephalitis.

3 That AD is not only affecting memory but also
4 various other cognitive faculties is very well illustrated in
5 "Safe House." In this thriller Mace Sowell, a retired
6 secret agent, has locked himself up in a villa that is
7 equipped with high tech surveillance instruments. The
8 screenwriters skillfully manage to incorporate what seem
9 to be paranoid delusions of the main character in the plot
10 and even the progressive diminishing of his visuocon-
11 structive capacities seem to play an important role in
12 story development.

13 Neuropsychiatric Manifestations

14 The prevalence of neuropsychiatric manifestations
15 were scored using the different items of the first part of the
16 BEHAVE-AD (Table 1). Three characters had no
17 neuropsychiatric disturbances at all. This seems compar-
18 able with findings in real life AD patients, although
19 methodology differed.⁸

21 Diagnosis and Follow-up

22 Only in 58% of the films is there direct or indirect
23 evidence of the fact that the patient has consulted a
24 doctor and that the diagnosis of AD has been made. The
25 initiative to consult a doctor was not statistically different
26 between films from before and after the millennium
27 change. The off-handed manner in which characters,
28 including doctors, talk about the disease does not seem to
29 have changed either: only in 43% or ten of the 23 films
30 (excluding "Diagnosis" for dealing with Lewy body
31 disease) the word "Alzheimer" is used. In "The Note-
32 book," a young doctor uses the obsolete term "senile
33 dementia" when talking to Noah and he follows with
34 "It's irreversible, it's degenerative." Only 5 of the 11
35 characters who live at home and where a doctor has made
36 the diagnosis seem to benefit from a medical follow-up.

37 Some movies shortly focus on the diagnostic process
38 itself. In "Folks!" it is a retired doctor who, by sheer
39 observation of his friend, suggests the diagnosis to his
40 son. No further clinical investigations are requested. Even
41 the doctor suffering from AD in "Time to say goodbye?"
42 has only a brief neuropsychologic examination before his
43 colleague makes the diagnosis. In "A Song For Martin,"
44 it is suggested that the neurologist recognizes the disease
45 after inspecting a brain scan. Only the series of
46 prediagnostic tests in "Do You Remember Love?" can
47 really convince of the earnestness of the clinical examina-
48 tion, although a brain angiogram can hardly be said to be
49 part of clinical routine in the diagnosis of AD.

51 Medication

52 Tacrine, the first central inhibitor of acetylcholines-
53 terase, was approved by the American Food and Drug
54 Administration in 1993. In only 2 of the 17 reviewed films
55 that were released after 1997 (considering that it takes
56 several years from writing a first draft of a scenario to
57 the release of the eventual movie and after excluding "Kaas"
58 because its script was based on a book written in 1933),

there is evidence of the character being treated with this
class of drugs. In 1998, the American movie audience
could see for the first and last time a character using
cholinesterase inhibitors on a regular basis: Mace Sowell,
the secret agent in "Safe House," a film which was never
distributed in Europe. The only other patient taking
tacrine is Ledda, the professional killer in "The Alzheimer
Affair," but he actually uses it like Popeye takes spinach,
as a kind of boost for his memory during episodes of
confusion. In "A Song For Martin," Martin's neurologist
advises against the use of cholinesterase inhibitors,
because "love and mental gymnastics are the best
treatment." The use of more recent cholinesterase
inhibitors or memantine, an *N*-methyl-D-aspartate recep-
tor antagonist only approved by the Food and Drug
Administration in October 2003, have not yet started a
movie career.

Despite the use of older medications in the
treatment of neuropsychiatric manifestations, the char-
acters seem rather under-treated compared with real life:
only 3 of 25 patients take psychotropics on a regular
basis.

83 Nonpharmacologic Interventions

84 The use of mnemotechnic aids seems only a
85 privilege for professional killers and secret agents. Just
86 like in "The Notebook" the grandson of Rose in "The
87 Remembering Movies" tries to stimulate the memory of
88 his grandmother by giving her autobiographic informa-
89 tion.

90 In "Kaas," on the basis of the novel with the same
91 name by Willem Elsschot, the family of the demented
92 mother has noticed that her purposeless activity is not
93 necessarily a symptom that should be suppressed: all
94 children bring their potatoes to her house to get them
95 peeled.

96 The husband in "Down in the Delta" excels in the
97 use of various environmental and other nonpharmacolo-
98 gic interventions for episodes of delusional thinking or
99 agitation.

101 Caregivers

102 Most characters being in stage 5 to 7 of the GDS
103 (mean: 5.5, range 0 to 7), they have to rely on the help of
104 their caregivers to survive. Only Vada's very demented
105 grandmother in the romantic comedy "My Girl" does not
106 seem to need assistance in daily life. The character's
107 dependence, often on one single nonprofessional care-
108 giver, is frequently a source of frustrations and conflicts
109 for the caregiver and leads to verbal ("A Song for
110 Martin," "Iris") and physical abuse ("My Mother's
111 Keeper"). In the opening scene of "Where's Poppa?"
112 Gordon, disguised as a gorilla, tries to scare his mother to
113 death. In "Time to Say Goodbye?" doctor Klooster
114 becomes a ping-pong ball in the conflict between his
115 family members about his right to commit suicide. In
116 "Speed of Life" Drew, having become a victim of
117 caregiver depression and burn-out, will kill his father
eventually.

DISCUSSION

Contemporary cinema industry becomes more and more interested in stories about patients suffering from degenerative dementia and their caregivers: 28 of the 53 films dealing with the subject were released after 1999, which is about 2.5 times more than expected by the total movie production for both eras. The author was able to view only 24 films (with 25 characters suffering from AD) of these 52 films and there are without a doubt films that have been neglected. Films that could not be found were not older or younger than the reviewed films, but were more likely to be TV films or shorts (50% vs. 25% of the reviewed films) or to be produced outside the United States (63% vs. 25%). TV films, shorts, and European or Asian films are less likely to benefit from wide distribution than American theater films are, and therefore they probably will have a minor impact on how the public thinks about AD.

Most films seem to be rather well documented about the clinical picture of AD, including neuropsychiatric manifestations. Wandering seems to be an especially popular theme, probably because it gives the screenwriter the occasion to change rapidly and unexpectedly the story's location, to create tension and to introduce new characters or conflicts. "Folks!" and "Travelling Companion" are basically a form of road movies by getting their narrative drive almost exclusively from the patient's permanent state of wandering. Delusions too can bring important momentum changes in the film's plot. A very clever illustration in the mechanisms underlying delusional thinking can be found in "Where's Poppa?" in which Mrs Hocheiser first has to mistake her personal nurse for her own son before she can accuse her of being an impostor. Surprisingly, no single scenario contains episodes of visual hallucinations, although they might be cinematographically interesting and are present in 13% to 80% of the population suffering from AD.⁹

In contrast to the clinical accuracy, there is a remarkable therapeutic and even diagnostic nihilism which is not limited to older films: often the patient and his family do not seem to find it important to consult a doctor, and even in that case therapeutic interventions and further follow-up of the patient are rarely mentioned.

Hereby they reinforce the disease being one of the last medical taboos. This makes fictional doctors not much different from their colleagues in real life. From questionnaires sent to general practitioners¹⁰⁻¹² in different West-European countries, it seemed that only 25% to 39% of the doctors revealed the diagnosis of AD to the patient, and comparable data can be found for psychiatrists¹³ and geriatricians¹⁴ dealing with AD patients. In a French study, only 1 of the 4 doctors used the term "Alzheimer" in the presence of the patient, often using the argument that there is nothing to offer these patients.

The influence of film and television on health care should not be underestimated: when the popular British soap opera "Coronation Street" featuring a character with AD (Mike Baldwin) was broadcast together with the

number of their helpline, calls to the British Alzheimer Society peaked to an absolute record on the evening of the diagnosis.¹⁵

One must not forget that the way in which patients are portrayed by screenwriters and actors is primarily intended to serve a dramatic than an educational purpose. This is illustrated by the screenwriters' choice for highly educated people, probably in an attempt to make the impact of the forgetting as dramatic as possible: just like it's probably worse for a piano player to loose his hand than to miss a leg, they suggest that the decline of cognitive functioning is harder to accept for intellectuals. Nevertheless, screenwriters should be aware of the influence they can have on the public opinion and might consider to contribute in the fight against prejudice through collaboration with doctors and patients organizations.

ACKNOWLEDGMENTS

The author thanks Dr Anne Clara for suggesting several film titles, Steven Buysse for transferring tapes to VHS-PAL format and the writers, directors or producers Georgia Lee, Vickie Patik, John Putch, Cristopher N. Rowley, Rob Schmidt, Malissa Strong, and Mike Yakovchik for being so kind to provide a copy of their film.

REFERENCES

- Cummings JL. *The Neuropsychiatry of Alzheimer's Disease and Related Dementias*. 1st ed. Oxon, England: Taylor and Francis; 2003.
- Rowland W. A modest proposal: the class-action case against television. *Int J Media Cult Politics*. 2005;1:149-152.
- Wijdicks EF, Wijdicks CA. The portrayal of coma in contemporary motion pictures. *Neurology*. 2006;66:1300-1303.
- Baxendale S. Memories aren't made of this: amnesia at the movies. *BMJ*. 2004;329:1480-1483.
- Dastoor DP. Film review: the subjective experience of Alzheimer's disease. *Am J Alzheimers Dis Other Demen*. 1991;6:40-42.
- Reisberg B, Ferris SH, de Leon MJ, et al. The Global Deteriorating Scale for assessment of primary degenerative dementia. *Am J Psychiatry*. 1982;139:1136-1139.
- Burns A, Lawlor B, Craig S. *Assessment Scales in Old Age Psychiatry*. 1st ed. London, England: Martin Dunitz Ltd; 1999.
- Cummings JL, Mega M, Gray K, et al. The Neuropsychiatric Inventory: comprehensive assessment of psychopathology in dementia. *Neurology*. 1994;44:2308-2314.
- Fénelon G, Mahieux F. Hallucinations et démence—prévalence, semiologie et pathophysiologie. *Rev Neurol*. 2004;160:2S31-2S43.
- Vassilas JA, Donaldson J. Telling the truth: what do general practitioners say to patients with dementia or terminal cancer? *Br J Gen Pract*. 1998;48:1081-1082.
- De Lepeleire J, Buntinx F, Aertgeerts B. Disclosing the diagnosis of dementia: the performance of Flemish general practitioners. *Int Psychogeriatr*. 2004;16:421-428.
- Cantegreil-Kallen I, Turbelin C, Olaya E, et al. Disclosure of diagnosis of Alzheimer's disease in French general practice. *Am J Alzheimers Dis Other Demen*. 2005;20:228-232.
- Clafferty RA, Brown KW, McCabe E. Under half of psychiatrists tell patients their diagnosis of Alzheimer's disease (letter). *BMJ*. 1998;317:603.
- Rice K, Warner N, Tye T, et al. Telling the diagnosis to patients with Alzheimer (letter). *BMJ*. 1997;314:375.
- Alzheimer's Society Press Release. Record calls as Alzheimer's captivates the nation. [Alzheimer's Society web site]. March 17, 2006. Available at: http://www.alzheimers.org.uk/News_and_Campaigns/Press_Releases/m_060322Helpline.htm. Accessed July 25, 2006.

APPENDIX A

List of viewed films containing one or more characters suffering from degenerative dementia, in chronologic order.

1			25
3			27
5	1. Where's poppa? (Carl Reiner, USA, 1970)	15. A Song for Martin (original title "En Sång för Martin," Bille August, Sweden, 2001)	29
7	2. On Golden Pond (Mark Rydell, USA, 1981)	16. Son of the bride (original title "El Hijo de la novia" Juan José Campanilla, Argentina, 2001)	31
9	3. Agnes of God (Norman Jewison, USA, 1985)	17. The Remembering Movies (short, Cristopher N. Rowley, USA, 2002)	33
11	4. Do You Remember Love (TV movie, Jeff Bleckner, USA, 1985)	18. The Alzheimer Affair (original title "De Zaak Alzheimer," also known as "The memory of a killer." Erik Van Looy, Belgium/Netherlands, 2003)	35
13	5. My Girl (Howard Zieff, USA, 1991)	19. My mother's keeper (short, Malissa Strong, USA, 2003)	37
15	6. Folks! (Ted Kotcheff, USA, 1992)	20. A Time to Remember (TV movie, John Putch, USA, 2003)	39
17	7. Travelling Companion (original title "Compagna di viaggio," Peter Del Monte, Italy, 1996)	21. Ariana (short, Michael Sandoval, USA, 2004)	41
19	8. Time to say goodbye? (David Jones, USA, 1997)	22. Diagnosis (short, Georgia Lee, USA, 2004)	43
21	9. Down in the delta (Maya Angelou, USA, 1998)	23. Noel (Chazz Palminteri, USA, 2004)	45
23	10. Safe House (TV movie, Eric Steven Stahl, USA, 1998)	24. The Notebook (Nick Cassavetes, USA, 2004)	47
	11. Kaas (Orlow Seunke, Belgium 1999)		
	12. Speed of life (also known as "Saturn) (Robert Schmidt, USA, 1999)		
	13. Firefly dreams (original title "Ichiban utsukushî natsu", John Williams, Japan, 2001)		
	14. Iris (Richard Eyre, UK, 2001)		