

Alternative Medicine The Role and Meaning of ritual in the Placebo effect

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Lokaverkefni til BA-gráðu í Mannfræði Félagsvísindasvið



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Abstract

In the last few decades, what is commonly known as complimentary and alternative medicine (CAM) has become increasingly popular. Simply put, it is any form of healing; method or medicine, that is generally not acknowledged by health authorities. It differs between societies, what is CAM to us is traditional in other countries. Many CAM treatments seem to focus on the patient as a whole, i.e a mind inside of a body and attention needs to be given to both if healing is to take place. This personal approach seems to be one of the main factors for its popularity in recent years. The main problem seems to be that not enough clinical research has been made that shows beyond any doubt the efficiency of these treatments, and that process is not made any easier by the fact that is an umbrella term that covers a vast field of different therapies and medicines which makes terminology and classification difficult. Doctors are therefore hesitant to recommend any remedies or treatments that have not been through the clinical scrutiny that traditional medicine has to go through before it is put in the shelves of pharmacies, stating especially the risks of these treatments colliding with traditional medicine the patient may be receiving. Some have even gone so far as to dismiss nearly all effects of CAM as mere placebo effects stating lack of research to prove that its effects are anything else. Even though the placebo effect clearly is a part of CAM it is an oversimplification to say one is the same as the other. The dismissal of placebos as inert does not stand up to scrutiny, as many tests have shown that their use has proven effective in many circumstances. On the other hand much more research is to be done before we can really tell just how effective CAM and placebos are and if they should have their place in modern medicine.

Útdráttur

Á undanförnum áratugum hefur það sem er almennt þekkt undir heitinu óhefðbundnar lækningar (ÓL) aukist gríðarlega í vinsældum. Þetta eru í stuttu máli hvers kyns læknismeðferðir, aðferðir eða lyf, sem almennt eru ekki viðurkennt af opinberum heilbrigðisyfirvöldum. Talsverður munur er á milli samfélaga, það sem er flokkað sem ÓL hjá okkur, flokkast sem hefðbundið í öðrum löndum. Margar þessara aðferða líta á sjúklinginn sem eina heild, b.e huga í líkama og ber að veita því meiri athygli ef að takast eigi að ná fram lækningu. Þessi persónulega nálgun virðist vera ein helsta ástæða aukinna vinsælda ÓL undanfarin ár. Helsta vandamálið er hins vegar að ekki eru til nógu góðar og nákvæmar klínískar rannsóknir sem að sýna fram á virkni þessara meðferða, og ekki hjálpar að hugtakið er í raun regnhlífarhugtak sem nær yfir gríðarstóran völl mismunandi aðferða sem gerir bæði rannsóknir og skilgreiningar mjög erfiðar. Þar af leiðandi eru læknar mjög hikandi að mæla með aðferðum eða lyfjum sem ekki hafa gengið í gegnum sömu rannsóknir og hin hefðbundnu lyf. Sumir hafa jafnvel gengið svo langt að afskrifa allar ÓL sem lyfleysuáhrif, og segja að ekki finnist rannsóknir sem sanna að um eitthvað annað sé að ræða. Þrátt fyrir að lyfleysuáhrif séu ákveðin þáttur í ÓL, er um of mikla einföldun að ræða að segja að þetta sé í raun einn og sami hluturinn. Það að afskrifa lyflevsur sem óvirkar stenst einfaldlega ekki skoðun þar sem margar rannsóknir sýna að þær hafa einmitt áhrif í mörgum tilvikum. Hins vegar liggur ljóst fyrir að frekari rannsókna er þörf áður en hægt er að segja til með fullri vissu hversu mikil virkni ÓL og lyfleysa er í raun og hvort þessir hlutir eigi sér hlutverk í nútíma læknavísindum.

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Introduction

The controversy that usually surrounds complementary and alternative medicine (CAM) is perhaps highlighted by the fact that this classification consists of therapeutic approaches that do not fit under any other single term. Originally, CAM was generally thought of as a range of therapeutic interventions that were not taught in medical schools or which were not widely practiced in hospitals across the United States. However, over the years that have elapsed since the 1980s when the role of CAM was only starting to get recognized, numerous strides have been made in this sub-field of medicine, with a wide range of alternative medicine interventions being taught in medical schools and practiced by conventional practitioners. Nevertheless, despite the significant milestones that have been realized in this field, a universal definition for CAM still eludes researchers. In addition, a range of controversial medical modalities such as the placebo effect that CAM has come to be associated with has only made debate about the intervention more virulent than before. This research paper seeks to assess the range of interventions involved in alternative medicine and the value of the placebo effect in the efficacy of these interventions. It is hypothesized that although there exists little evidence to show that clinical interventions based on the placebo effect are effective, the placebo effect is a central part of healing mechanisms such as those employed in alternative medicine. The paper is essentially split into two parts. In the first one I will explain basic definitions and types of CAM, its history, uses and try to understand why it has increased dramatically in popularity in the last years. I will give attention to some of the concerns that traditional practitioners of medicine have aired regarding use of CAM and its role in the general process of healing. I will give special focus to the United States where Cam has seen a soaring increase in the last decades and the United kingdom where important battles for recognition under the law have been fought. In the second part I will explain the placebo effect and try to shed some light on the connection between CAM and the placebo effect, explaining the general understanding of what we know as placebos and its effects and will attempt to dive a little deeper into the connection between CAM and placebos, trying to find the place and role of the placebo effect within the whole of CAM and put it in context. The reason why I have chosen complimentary and alternative medicine in context with the placebo effect is because I tend to be a bit of hypochondriac myself, and have gone more than a few trips to my doctor without there being really anything really wrong with me. A second reason is that I believe there is always more than one way to get better, and just getting a prescription from a doctor that cannot wait for you to get out so he can treat the next patient, is not the only way. I am therefore curious about CAM and just how much of it is actually scientifically beneficial and how much of it is the placebo effect.

1 Complementary and Alternative Medicine (CAM)

1.1 Definition and Trends

A range of definitions have been postulated for complementary and alternative medicine. According to Muskin (2008), CAM spirals over a range of treatments that are used to promote the wellness of people, which are used alongside the practices of conventional care and which are used to replace conventional treatment modalities. Whereas this is just a basic definition of the term, it offers insight into the place of alternative medicine in the face of other competing therapeutic approaches. Both researchers and clinicians have offered more detailed definitions of the concept, all of which present differing points of view.

According to Rees (2001) alternative medicine is used in reference to a range of diagnostic and therapeutic disciplines which fall outside the domain of conventional medicine. In particular, these are disciplines that exist outside the institutions where conventional medicine is taught or practiced. However, this definition is limited by the emphasis that it places on the physical locale upon which the practice of alternative medicine is based. Rees goes on to offer a more detailed definition of alternative medicine by proposing that alternative medicine involves a broad range of healing resources that include all modalities, practices, beliefs and theories attached to health systems, but in a sense that parallels conventional medicine. In essence, Rees notes that the best understanding of CAM is that which perceives these therapeutic approaches as approaches which are not in wide usage in medical learning and practicing institutions.

Alternative medicine covers a wide range of categories. These include, but are not limited to familiar therapies such as acupuncture, hypnosis, meditation, nutritional supplements and chiropractic. Other approaches that fall under the classification of alternative medicine, but which are less popular, include ayurveda, naturopathy, energy healing and Native American Practices (Muskin, 2008). Alternative medicine has a long history in the U.S, with early practices gaining popularity towards the end of the 18th century. According to Rees (2001), the popularity of alternative medicine spiraled at the beginning of the 20th century, with about 20% of all medical practitioners at the time being labeled as alternative physicians.

Although only a small number of consumers were versed with the meaning and practices of alternative medicine a few decades ago, alternative medicine has taken root in the contemporary American setting, with sales of these medical interventions pointing to an

unprecedented growth. Since the 1990s, it has been estimated that there has been 380 percent and a 130 percent increase in the sale of herbal substances and high-dose vitamins respectively. Some of the popular uses of alternative medicine have been the enhancement of memory, the reduction of inflammation through the use of tea tree oil, as well as the stimulation of the immune system through the use of ginseng (Rees, 2001). The trend has been noted on a global scale. It seems that people are resorting to consulting alternative physicians on an increased basis in addition to consulting conventional physicians. Although the practices involved in alternative medicine derive their bases from centuries of tradition and experiences, there has risen a growing consensus that these practices are based, in large, on the placebo effect (Rees, 2001).

1.2 Reasons for Increased Popularity

The increased popularity of alternative medicine can be attributed to the emergence of a number of factors. Primarily, most people have resorted to the use of alternative medicine in the belief that they stand to accrue benefits that are not available in conventional medicine and related therapeutic interventions. Consumers, for example, tend to pursue alternative medicine for the resolution of conditions that are taking long for conventional medicine to resolve, all with the expectation that their condition and wellbeing will improve in less time. This perception among consumers has significantly contributed to the success of the placebo effect in the practice of alternative medicine, as will be observed later (Rees, 2001).

Contemporary consumers are also resorting to alternative medicine because of the personal compassion and attention that is attached to its practice, as opposed to the impersonal nature of conventional and technological medical care. According to Rees (2001) the physician-patient relationship in conventional medicine has deteriorated over the years because of economic constraints, as well as the assembly-line nature of modern medicine. As doctors rush to attend to more patients and maximize on available resources, the warmly touch that was associated with most physicians is quickly disappearing. In contrast, this personal touch has not only been preserved in alternative medicine, but it has also been emphasized as one of the prerequisites of the healing process. Alternative medicine not only seeks to improve the condition of patients, but to better their general health and wellbeing, as well. As such, the development of an emotional bond between the physician and the patient has been an innate part of the healing process used in alternative medicine and its related therapeutic interventions. In turn, modern consumers are more accommodating towards

physicians who are not quick to prescribe drugs, but who are willing to listen and explore other means through which preexisting conditions could be resolved.

In addition, unlike the medical establishment which regards alternative medicine with suspicion and significant levels of contempt, the general public has come to perceive alternative medicine as a genuine public health alternative that will not fade away. To a large number of patients that seek alternative medicine, the most appealing aspect about this medicine is the emphasis that it places on the holistic development of the individual. The popularity of the practices attached to alternative medicine has also been on the increase because of the perceived, time-tested nature of these practices. Alternative therapeutic interventions such as the Chinese acupuncture have been practiced for hundreds of years, leading to the perception that they are a safe bet for the average patient (Harlington, 2010).

1.3 Safety and other Fringe Concerns

Whereas safety concerns have been mentioned by practitioners in the medical establishment as the main reason for their opposition towards alternative medicine, such concerns do not seem paramount to consumers who seek alternative medicine. According to Harington (2010) the overriding notion among most consumers is that natural therapies (which is what most alternative remedies are perceived as) are safe. In part, this demonstrated lack of awareness among consumers who pursue alternative medicine has been the main reason why conventional physicians regard alternative medicine with significant reservations. In addition, alternative therapies such as herbal medicines have been classified as dietary supplements under most health legislations, thus exempting them from the stringent analysis that conventional drugs are subjected to prior to their use among the public. The fact that a number of alternative therapies and medicines are not screened by public health-based establishments such as FDA has thus attracted concerns from the conventional medical practitioners about the safety of these therapies Rees, 2001).

In addition, the lack of sufficient research and information about the therapies pursued under alternative medicine places grave concerns about their safety. The extent of these safety concerns can be highlighted through the comparison of standard practices as exercised when conventional drugs are being rolled out. In the United States, for example, conventional drugs are placed in shelves for sale once the FDA has ascertained that sufficient clinical trials have been carried out in a bid to determine the safety of the drugs in question. Once the drugs are out for sale, it is upon the FDA to prove that drugs are unsafe for them to be recalled. The classification under which most alternative therapies fall, combined with the fact that scarce

information exists concerning the efficacy and safety of alternative therapies (even with the conduction of a significant number of clinical trials) makes these therapies problematic for the FDA to assess and control. In view of this assertion, a number of conventional practitioners have been on record asserting that the practice of alternative medicine is one huge, "uncontrolled experiment" (Rees, 2001).

In addition, significant concerns have been raised over the use of alternative medicine alongside conventional medicine without knowledge of the impact that this interplay might have on the health of the patient. Herbals used in alternative medicine such as garlic, for example, tend to interfere with the administration of anesthesia in the course of surgery. In addition, the consumption of some of the herbal materials might be fatal for cardiovascular patients since they contain anti-clotting properties. The fact that contemporary consumers are using alternative medicine alongside conventional medicine prescriptions with little knowledge of the risk that they are placing on their health has only compounded the safety concerns attached to the use of alternative medicine (Rees, 2001).

1.4 Nature of Alternative Therapy Seekers

According to Donal & Larimore (2006), scientific studies have continually indicated that conditions under which placebos work best are the same conditions in which alternative medicine and therapies are often pursued. This assertion largely highlights the place of the placebo effect in alternative therapies, and has been backed by clinical evidence. Donal & Larimore assert that most people who pursue alternative therapies are often overly anxious about their health and wellbeing when compared to the average patient. These patients have often been labeled as "the worried well" because although they are often fairly healthy, they spend countless hours worrying about all forms of their health, monitoring their bodies and seeking assurances about their perceived ill health, usually from alternative physicians.

The high level of anxiety that is observed in patients seeking alternative medicine is relevant in this study because anxiety is one of the factors that is mostly affected by the use of placebos. This assertion is inferred by Thompson, Ritenbaugh & Nichter (2009) when they assert that placebos are an essential resource for doctors who find themselves constantly harassed by anxious, neurotic patients. When the administration of placebos is accompanied by positive interaction between the patient and the physician, together with other elements as proposed by the Optimal Healing Environment framework, then the placebo effect is

significantly influenced. Donal & Larimore (2006) assert that this interpersonal approach is one of the primary modalities upon which the practice of alternative medicine is based.

In essence, the perception that the only real benefit that emanates from alternative medicine is derived from the placebo effect of these therapies might be a common perception among the skeptics of alternative medicine, but it carries some element of truth in it. Although the placebo effect is not the sole element from which alternative medicine derives its benefits per se, it emerges as a significant component in the healing process of alternative medicine interventions. The value of the placebo effect is increasingly being recognized. Recent moves in scholarly circles have been geared towards pushing for the placement of the placebo effect into a "real effect" category (Institute of Medicine, 2005)...

1.5 The Healing Process

In an analysis of the healing process Moerman (2002) cites three major responses that human beings make towards the resolution of injuries and ailments. According to Moerman (2002) autonomous responses are not only a first, but are also the most important responses in the context of the healing process. These are responses that a patient usually invokes towards regaining equilibrium and ultimately, the optimal health. Autonomous responses include the invocation of immunological, as well as other related systems. In this context, Moerman (2002) asserts that a cut finger could be "healed" by merely licking it. The other two responses are specific and meaning responses. Specific responses are responses that the body makes towards the content of medicine. The antibiotic quality of penicillin, for example, enables the body to achieve healing. Meaning responses, on the other hand, enable healing through the interaction that the patient makes with the healing mechanisms. The use of bright colors in the hospital environment, for example, often serves to speed up the healing process.

Other conventional frameworks that have been used to explain the healing process point out to the essence of external symbols and interactions to a greater extent than that which Moerman highlights. Rakel (2012), for example, asserts that the healing process involves four basic components:

- A patient-physician relationship that is emotionally charged
- A healing setting
- A succinct explanation of factors that contributed to the condition and the subsequent symptoms

• A procedure, plan or ritual that involves both the physician and the patient and an companying mutual belief that the problem will be resolved through these efforts.

It is essential to note that the input of medicinal content has not been cited as a prerequisite within this healing process. This view by Rakel (2012) is one which has been shared by conventional physicians for centuries on end. To an extent, this view of the healing process is justified by the fact that it has enabled physicians to help patients achieve optimal health even in environments where medical therapies or interventions were not possible. An example is the home setting where caring for a bed-ridden relative without the use of medicine has often led to the emergence of desirable results.

These components are largely the components upon which the use of alternative medicine and therapeutic interventions is based. The same can be said about conventional medicine and its related interventions. When a patient suffering from depression decides to seek help, for example, he goes to see 1) a physician with whom he has an emotional relationship 2) in a medical clinic which doubles as the healing setting 3) where the physician issues a logical explanation of the patient's symptoms as a reduction in serotonin levels 4) and both the physician and patient agree on a prescribed therapy, which they both believe will lead the patient to achieve optimum mental health. When all these components are intertwined into the healing process, the nature of the medication given makes little difference. In a meta-analysis of data submitted to the Food and Drug Administration in the U.S, for example, it was found that both the medication used for the treatment of mild depression and a placebo disguised as medication for the same purpose achieved near-similar, beneficial effects when they were administered in the healing environment described above (Rakel, 2012).

The inclusion of these components in alternative medicine can be cited as one of the main reasons for the success of alternative therapeutic procedures and the subsequent popularity of these interventions in the U.S and across the globe. Interestingly, over the course of the past few decades, conventional medicine has recognized the value of these components to the extent that frameworks have been developed through which these components could be included in conventional therapeutic procedures. One such framework is the Optimal Healing Environment framework. According to Rakel (2012) Optimal Healing Environments (OHE) are environments in which the physical, psychological, behavioral, spiritual and social components are geared towards the achievement of innate healing and a sense of wholeness in the health of the patient. The OHE framework can be perceived as an

extension of Engel's biopsychosocial model which presented a basis upon the external influences on health could be understood.

As such, Optimal Healing Environments largely derive their basis from the practices of alternative medicine, which places great emphasis on the input of external, non-medical interventions. Just like alternative medicine, Optimal Healing Environments rely on internal resources while minimizing the use of external resources. In the long run, the cost associated with these interventions is usually low and can account for the popularity of alternative medicine. Additionally, unlike other interventions (such as conventional medicine and therapies) where OHE is absent, the side effects associated with these interventions are potentially positive. The achievement of wholeness, for example, often increases the well-being of the patient in question and often reduces a range of risk factors.

1.6 How CAMs Enhance Human Capabilities

Sointu (2013) argues that unlike the scientific methods of healing which are mainly focused on eliminating pathogens or inducing strength and comfort among sick people, complementary and alternative medicines offer a form of energy that leads to the harnessing of inner power. Through empowerment, people feel more in control of their healing process, their feelings, their resistance to diseases and most importantly, their immunological agency. As such, the author argues that the importance of CAMs in medical practice should not be based on their scientifically proven medicinal value but rather their mental power which is more important as compared to the healing process. CAMs thus spell positivity and optimistic perspectives which likewise enhance the healing process.

CAMs thus call for analysis that overpowers biomedical and scientific effects, and their overall influence on positive perspective among the ailing patients. The focus on the complementary medicine as a scientifically proven healing capacity should thus be ignored and the key focus should be on their influence of the patient's mental well being. The positivity that accommodates the use of these drugs for non-medicinal healing is the key strength to understanding CAMs and embracing them in clinical practice. Regardless, negativity associated with discouragement of these methods is the key reason why most people undergo pain and suffering when clinical medicine fails to work as efficiently as assumed.

Sointu (2013) argues that the phenomenological understanding of personified subjectivity to control the healing process is crucial for the overall wellbeing of humanity and health. This also paves way to the promotion of understanding of healing whereby

individual's healing processes are better understood beyond the scientific viewpoint. In the study the assessment of the healing powers presented by the CAMs was undertaken from results from clinical practitioners who embraced both the scientific healing processes as well as the complementary alternatives in enhancing performance of medicine in England. The research shows that though marginally ignored in the field of science, CAMs are equally efficient as contemporary or scientific medicine.

The analysis of health and wellness should not be based on the superiority of the methodology being applied in comparison to other ways through which health and immunity can be enhanced. Additionally, social inscription, which is a critical area of assessment in anthropology and the beliefs that people moves from their culture, have a critical influence on human performance which thus indicates that though ignored CAMs especially from ethnic and spiritual backgrounds has equally healing capabilities as the scientific methods that are widely used. Contemporary medicine was purposely crafted to induce healing and not facilitate it. Through the use of medicine, the various side effects associated with the treatment methods thus highlight that though proven to be effective, the human body rejects external chemicals incited to induce healing to some perspective.

This argument thus presents a platform of discourse on just how effective medicine and drugs are to the body and its healing capabilities. Exploring CAMs as a way to improve the healing process would shed light on a better and clearer understanding of the overall role of the body in inducing "self-limiting" capabilities. Exploring CAMs would also give clinical practitioners an upper hand in quality treatment since it would provide a platform for inducing healing through whatever means necessary. As such, CAMs might just be the alternative to developing human body resistance to diseases and increasing the human capabilities to improve healing which would be a major breakthrough in the world of medicine (Sointu, 2013).

1.7 National and International Perspectives

Alternative medicine, the value of the placebo effect and the perceived efficacy associated with these constructs has not only been a subject of debate among medical practitioners, but among legislators across the world, as well. Alternative medicine was particularly brought into perspective in the 1970s when governments in the West made stringent requirements that all new drugs must be subjected to clinical trials before they are used in a medical setting, with a certain level of emphasis on the use of placebos for trial control purposes (Evans, 2004). While this move was designed to protect the public from harmful drugs, Evans (2004)

asserts that it is relatively easy to see why this move was only half-measure. For one, this legislation imposed a higher burden of proof on alternative medicine than any other form of medicine since clinical trials are hard to administer and in instances where such trials are possible, they are largely unethical. As such, double standards were being imposed on the use of alternative medicine. Even if physicians were to comply with this new legislation, the use of placebos in clinical trials that involve surgery would not only be difficult to achieve, but it would also be unethical.

Whereas research into the value and efficacy of alternative medicine has been on the increase, the results of studies related to the same have largely produced ambiguous results. As such, the licensing of alternative medicine at the time was scarce since most clinical trials that concerned alternative medicine only produced scanty results. Nevertheless, alternative medicine continued to thrive in many other countries, mainly because it was unregulated and was often perceived as a "witchdoctor's practice" (Evans, 2004). Even in the West where legislation on alternative medicine was in force, alternative interventions continued to thrive since the enforcement of this legislation was not stringent enough.

1.8 . The United States

In part, libertarian views have contributed to the rise and acceptance of alternative medicine as a mainstream domain in medicine in the United States. The conventional view here is that if people wish to spend their money pursuing remedies that have not been proven, and which are largely viewed as working because of the placebo effect, then they are within the constraints of their rights to do so. To stop consumers from doing so would be tantamount to infringing on their inherent rights. However, even with the popularity of these libertarian views in the U.S, it would seem that there was growing concern that the choice to seek alternative medicine is not a free one, majorly because the patient does not have sufficient information about the nature and value of the therapeutic interventions being sought. According to Evans (2004) it is typical for the practitioners of alternative medicine to offer scanty or misleading information on the success rates of the interventions which they seek to promote. This perception has undermined the libertarian view and in turn, called for a closer examination of the practices involved in alternative medicine.

Since the 1970s, alternative medicine has attracted significant attention from legislators, especially in the United States. The introduction of codified legislation as relates to alternative medicine can be traced back to 1992 when the Office of Alternative Medicine (OAM) was established with the sole purpose of exploring medical practices that were

perceived as "unconventional". One of the early mandates of the office was to propose the Dietary Supplement Health and Education Act to Congress in response to the input of the food industry and the public in 1994. The act exempted the manufacturers of dietary supplements from conducting premarketing testing and on the safety and the efficacy of their products, as had previously been outlined by the Food and Drug Administration. The office is also accredited with pressuring the FDA to declassify acupuncture as merely an experimental practice in 1994 (Institute of Medicine, 2005).

In essence, since the 1990s, the United States government, through the Office of Alternative Medicine, has been at the forefront in loosening the previously stringent legislation attached to the practice of alternative medicine and subsequently promoting the use of therapeutic interventions. In a move that was meant to increase public knowledge and adoption of alternative medicine through showcasing its efficacy, the Office of Alternative Medicine in 1997 opened the first multicenter trial of alternative medicine therapy. The multicenter tested the efficacy attached to the use of Hypericum for the treatment of depression, together with a range of other alternative therapeutic interventions.

However, even with the milestones that had been achieved by the legislative body of the government as relates to alternative medicine, the scholarly community was rife with debates as relates to the efficacy of alternative medicine. Opposition towards the use of CAM therapies was especially common in England, largely because of the input of the scholarly community. In one of the copies of the England Journal of Medicine in 1998, the editorial was firm in the assertion that it was time for the government and the medical community to stop giving alternative medicine the free ride that it was getting. One of the popular assertions made by the editorial, and shared by a large audience of medical practitioners, was that there is only medicine that works and that which may or may not work; and that there was no alternative medicine as such. On its part, the American Medical Association dedicated space within its journals for the comprehensive debate on alternative medicine and therapies associated with the same. The move by the association attracted a large medical audience, with 18 trials being conducted towards this end a total of 180 articles being published by the year's end (Institute of Medicine, 2005). Although the bulk of the opinions and commentaries were negatively biased towards the place of alternative medicine, it was the first time that alternative medicine had been cast in such a perspective. It was also the first time that analysis was made on alternative medicine as a complex issue.

Nevertheless, Congress was bent on ascertaining the efficacy of alternative medicine therapies and promoting its adoption among the public in instances where trials produced desirable results. In 1998, Congress increased the budgetary allocation for OAM from the initial \$2 million to \$19.5 million, elevated the office to a national center and increased further the allocation for the subsequent fiscal year to \$48.9 million (Institute of Medicine, 2005). In the years that followed, significant moves were made towards the promotion of the use of alternative medicine. In 2000, for example, the then president Bill Clinton established a white house commission for the sole purpose of creating policy on the use of complementary and alternative medicine. The primary goal of the commission was to study policy issues in the fast-burgeoning field of alternative medicine and report on the findings made. The final report by the commission made recommendations on how research on CAM should be conducted and reported on the coverage of CAM therapies in the country, as well as the potential of CAM in promoting the health and wellness of citizens (Ruggie, 2004).

Since then, alternative medicine has come to be perceived as an area of medicine that lacks in and needs extensive research, rather than an area that is not worthy of the attention that it receives. One of the major moves made in this regard has been the establishment of a Consortium of Academic Health Centers for the purpose of developing programs related to alternative and integrative medicine. Members of the consortium are chancellors who have demonstrated concerted efforts in developing programs that guide the research, education or the clinical delivery of alternative medicine therapies (Ruggie, 2004). Since the establishment of the consortium in early 2003, the consortium has sought to transform the perception of alternative medicine and its related practices through educational programs that are innovative, as well as scientific studies that will lead to the development of new models as relates to clinical care in alternative medicine.

The dedication of resources and research towards the determination of the place and value of alternative medicine has been marked by significant positive impacts. An increased understanding of alternative medicine has not only been achieved in the United States, but recent trends also point to an increased adoption of alternative therapies, as a result. The role of the placebo effect in the workings of alternative medicine has not eluded current research either. In 2000, the NIH held a workshop that sought to understand the placebo effect as a "real effect" (Institute of Medicine, 2005). The workshop since then triggered renewed interest (even among skeptics) in research geared towards the determination of the impact of non-scientific effects (such as context, expectation and belief) on recorded clinical outcomes.

1.9 The United Kingdom

Throughout the course of the twentieth century, practitioners of alternative medicine in the UK have forged a constant battle in a bid to obtain a legal basis for their practice. According to O'Sullivan (2005) records by the National Association of Herbal Medicine in the UK depict the constant harassment of herbalists and other practitioners of alternative medicine by the medical establishment that was always opposed to their practice. In essence, these constant harassments were meant to suppress and subsequently outlaw the practice of alternative medicine in the country. However, even when the medical establishment pushed for the amendment of the Medical Act in 1886 in a bid to have alternative medicine outlawed, alternative practitioners campaigned successfully against the proposed amendments and the proposals were shot down.

With the prevalence of the use of CAM therapies in most European countries towards the end of the twentieth century, lawmakers in the UK, as well as the medical establishment, were forced to loosen their stance on the practice of alternative medicine. The Lannoye Report, which was commissioned in 1994, was especially instrumental in highlighting the value of alternative medicine and propelling the practices associated with the same to a legal limelight. The report, which was overseen by MEP Paul Lennoye, primarily sought to boost the recognition of alternative medicine in the UK, and the European Union in extension. One of the most prominent provisions of the report was that alternative medicine practices should be harmonized across the European Union, and training in medical institutions established for the promotion of these practices. The report also called for the full funding of research geared towards ascertaining the efficacy of alternative therapies (O'Sullivan, 2005).

Expectedly, the Lennoye report was met with significant opposition from both pharmaceutical and medical studies. Nevertheless, parts of the report were adopted by the parliament, marking one of the most significant steps towards the full recognition of alternative medicine in the UK. A subsequent report by Lennoye in 1996 was also amended and adopted by parliament. Over the years since then, debate over the place of alternative medicine in the country has been rife among legislators and the medical establishment. This debate culminated in a directive that sought to issue a legal basis for alternative medicine, and which became law in 2004 (O'Sullivan, 2005).

Current legislation allows for over-the-counter sale of herbal products and other alternative medicine therapeutic interventions. However, this legislation contains a number of limiting clauses, which have placed strict conditions on the practice of alternative medicine.

The practice of alternative medicine, for example, is limited to minor ailments which are self-limiting (O'Sullivan, 2005). Such practice is only conducted upon the issuing of a license when one meets the minimum conditions as outlined under the Good Manufacturing Practice. The therapeutic interventions which the conventional practitioner seeks to use must also be backed by a minimum of 30 years of continuous and safe use. Proposals are also underway to exempt the practice of alternative medicine from the Medicines Act of 1968 so as to ensure that alternative practitioners are not subjected to double obligations (O'Sullivan, 2005).

1.10 Other Countries

A host of other countries across the globe, such as Ukraine, Greece, Portugal, Cuba, Venezuela, Algeria, Comoros and Seychelles have adopted a monopolistic system in regard to the practice of alternative medicine (Maddalena, 2005). A monopolistic system means that all medical professions are licensed and only conventional physicians are permitted to provide medical treatments. However, despite the existence of stringent legislation that only accommodates conventional medicine, such legislation can be perceived as largely being on paper since authorities are relatively accommodative of the practices of alternative medicine. Specific regulation as relates to alternative medicine is scarce in these countries, and the legal status of CAM is derived from general regulations.

The general regulatory framework in these countries outlines illegal practice as that which is conducted by individuals who do not possess any documents affirming that they attended some form of training and acquired the relevant professional skills for their practice. In this regard, authorities are only tolerant to the practice of alternative medicine if the practitioners hold at least a diploma from a physician-training institution. Other than that, the current, legal stance is that the practice of medicine is only the preserve of conventional doctors. This means that only licensed doctors can make diagnosis, offer treatments, make prescriptions or conduct surgeries (Maddalena, 2005).

On the other hand, countries such as Belgium are accommodative of the practice of alternative medicine and do not impose strict regulations concerning its practice. In 1999, for example, the Belgian parliament adopted an Act that provided for the practice of alternative medicine in the country. The act, which effectively removed Belgium from the monopolistic system of other countries as outlined above, allows for the practice of alternative medicine on the condition that the practitioners obtain registration that relates to their preferred practice. The registration is governed by the ministry of Public Health and is only issued when the set minimum requirements are fulfilled. At its adoption, the act regulated the practices of

osteopathy, homeopathy, chiropractic and acupuncture. Acupuncture has attracted more stringent regulation over the years, and its practitioners are required to be members of a professional medical organization (Maddalena, 2005).

1.11 Contemporary Medicine Vs. the Body's Innate Healing Capacity

From an anthropological perspective, placebo effect is comparable to the physiology symbols of healing which are derived from manipulation of healing power to induce the healing power in people. The placebo effect however, is not a contemporary western medical healing process but rather one derived from non-western sources (Moerman, 2002). This thus shows that there is a possibility of other drugs and treatment methods that can be adopted from cultural backgrounds. The anthropology of medicine that not only encompasses the use of scientifically proven ways to heal people, but rather should focus on the non-western unknown treatment methods which seem to work efficiently.

From Moerman's (2002) perspective human beings are cultural animals, and the culture in which people exist determines their healing abilities. Western cultures believe in medicine as a healer, whereas some religious cultures believe in prayer as a healer. The bottom line in both cultures is that it leads to healing and it promotes health among its members. As such, contemporary ways are all bound to drugs as a source of healing, and in such a case, then the use of inert drugs which have no medicinal value whatsoever, will work efficiently for people in western nations. For religious people on the other hand, in the absence of drugs, their faith in prayer likewise results in healing, and as such, medicine or pills used on such people would be relatively inefficient despite the efficiency of the drug in the contemporary world.

Exploring the effects of culture on immunity and the health of people thus sheds light on the healing capacities of the human body. The cognitive responses inscribed in a human being from their culture thus explore the overall efficiency in the administration of drugs which thus evokes positive outcomes. Moerman (2002) assesses the origins of placebo, which has been translated as a meaning for "I shall walk, or I shall please the lord" (Moerman, 2002:11) which is based on a human being's overall influence on their capacity. Placebo has also prompted some scientists to assess the overall capacity of the brain in harnessing inner power and influencing the performance.

According to Moerman (2002) medicine does not heal people, but rather people heal themselves. The aspect of immunity comes with or is surrounded by the contention by people that they own their individual innate healing abilities. What medicines do to people is neutralize the pain, making the unhappy and painful conditions associated with a disease more comfortable. Colds and headaches which are the most familiar diseases or ailments that people face on a daily basis normally go away by themselves as people put it and if this is the case then medicine itself can be assumed as a way to help the body heal itself as opposed to the common argument that most medicines actually heal people. As such, it is arguable that most ailments are created by individuals, and as such they are also self-limiting, what people assume as "going away on their own."

However, these self limiting factors about ailments do not account for the placebo effect. In fact the placebo effect does not account for any healing capacities of the body, since they do not induce healing hormones nor increase the number of leucocytes within a given patient. As such, the understanding of the placebo effect shows that most of these ailments are healed through an unexplainable mechanism. From this contention, the overall purpose of contemporary medicine that is mostly argued on the contention that it is a science, and people believe in medical or otherwise healing capacities of the body, which accounts for most of the healing processes. Additionally, the overall purpose of medicine is questionable if people actually can heal diseases and fight pathogens on their own.

Arguably, there are several healing processes as presented by Moerman (2002). One of the key ways through which the healing system in people is evoked is through the direct autonomous responses which are based on immunological and related responses. This being the case, the healing of the body is mostly focused on the healing process whereby a cut of finger heals itself with the platelets being directed to the injured parts. As such, drugs and medicines used in the contention thus not only present a platform for increasing the number of platelets assigned to the injured parts but also reduce the pain that the people feel through prompting the body to release hormones that make the nerves less pain receptors.

Arguably, advertisements and popularization of any given drug as a source of pain relief has had remarkable impacts on human psychology and the subconscious mind. With the advertisements that pain relievers actually ease pain, take away headaches and also enable people to sleep more efficiently is one of the key reasons that people use pain killers whenever they are in pain. This is the same argument that is used in drugs which enable the release of endomorphines and dopamine thus causing the mind to relax. The basis of such an

argument thus presents the case that drugs have no effect on the body but arguably the perception that certain drugs ease pain is the key reason why people are dependent on drugs and pain relievers.

The power of a placebo drug is mostly reliant on the marketing strategies employed by the drug manufacturers of an active drug. For instance, the assumption that a certain brand is more effective than another is the key reason why people require a prescription of certain drugs to assist their bodies to heal and improve in quality. A study conducted by Moerman (2002) shows that placebo tablets that were labeled with a more marketed and preferred drug had higher healing capabilities as compared to placebo tablets which were labeled using unpopular brand names. This study thus shows that medicine and other healing mechanisms that are scientifically blended have little if any influence on the overall performance of any given individual. This thus calls for the development of new sources of "medicine" or the commonly referred to as CAM.

The placebo effect once critically analyzed indicates that the level of human capabilities and their overall influence on healing a given ailment or disease. Additionally, the role of human beings in innate healing is more effective than the use of medicine or scientific ways to eliminate these medicines. The purpose of medicine is to increase comfort and ease unhappiness among sick or ailing people and this role should be understood by all scientists. The best way to heal ailments is thus not using chemicals to develop drugs that will trick people that they actually have healing powers but rather the focus on any way that makes people more comfortable, or that has the capacity to convince them that it actually works.

1.12 Spirituality, Vitality, Holism and Faith: CAMs of the Future

Ning (2013) argues that for long, alternative and conventional medicine sources such as holism, vitalism, spirituality, natural healing and individual responsibility for health have been ignored by medical practitioners. Most pharmacists and doctors are scientists and thus spirituality and holism are not some critical areas that make a lot of sense to them. In fact, such contentions are argued as not only ineffective, but rather aspects of ignorance that has increased among the population. However, this is not entirely the case. The focus on the body as a self sustaining system developed to fight pathogens on its own as opposed to using scientific medicine needs to be embraced by most people practicing medicine. This being the case, most people bear the contention that they need medicine to heal, because their physicians and doctors advocated such methodologies to them, convincing them that this is the only way through which they can heal.

Ning (2013) however, ignores the perceptions brought in by medicine and focuses on these ways to improve the health of people. Exploring spirituality and the aspect of faith thus enables people to heal. Since people have seen miracles happen in real life, the strength of an individual's faiths thus largely enhances their healing and the development of superior healing capabilities much superior than all people who depend on hospitals for healing purposes. This argument thus presents a platform for discussion since the aspect of faith and spirituality which is largely and marginally ignored might be the ultimate solution to developing a healthier population.

Faith, which is the belief that something will actually happen is the same contention used by clinical practitioners in RCTs, where placebo tablets, pills or injections work for most patients. As such, faith, whether spiritual or in medicine is a key reason why people heal. As such Ning (2012) argues that exploring these fields would result in more positive outcomes among not only the patients but also to the medical field since the medical field's main purpose is promoting healing. Doctors who discourage the healing through other "unconventional" ways which would be the emphasis of health should thus shun from such discouragements and in actual fact promote them.

Ning (2012) however, argues that the efficiency of these skills and techniques need to mainly focus on the healing of the body and not on their educational background. Anthropological medicine thus covers various cultures and the diverse beliefs of people, integrated with clinical methodologies to produce positive results among most patients. Healing is not focused on science as argued by Moerman (2002), but rather the body's inner capacity and healing power. In fact, the aspect of holism has seen more positive results as compared to contemporary medicine, since scientific medicine results in lower body immunity as opposed to boosting it.

Ning (2012) believes that healing is an inner power, which does not depend on external sources but rather the capacity of one's brain to control the hormones and bodily innate healing powers which eventually create health. As such, faith, which not only focuses on the spiritual beliefs held by people but rather an individual's capacity to program their minds in a positive manner is the core source of healing. Emphasis on holism which results from individual power driven beliefs on the human and brain capacity would have commendable effects on the body as opposed to the use of tablets, injections and other medicinal or pharmaceutical products. Holism which focuses on the body purity and

harnessing one's inner power, through meditation and other practices such as yoga have seen people improve and become healthier.

Emphasis on vitality, which is enhanced through exercise, is a common contemporary practice. Regardless, its emphasis is on preventative powers as opposed to induced healing capacities. As such, Ning's assessment on vitality focuses on it as a way to promote healthy lifestyles while consequently improving immunity and innate healing capabilities from within. Placebo have been noted to work purely from convincing people that they are drugs, and thus convincing people that whatever activity they are engaging in has healing capabilities. Acupuncture and hypnosis have been noted to cure people whereas their main philosophies are based on mental deception. Why then would exercise as a method of promoting health, and harnessing the body's healing capacities, not work as efficient as these philosophies?

Ning (2012) also revisits a new ideology, which focuses on biomedicine as a CAM methodology. The work of herbs, based on arguments presented by Oriental communities was highly efficient in healing people. Prior to the communing of contemporary medicine, people used traditional methods to fight diseases and kill pathogens and miraculously, these methods worked very efficiently. The healing power held in herbs use the same methodology as modern scientific methods. As such, the use of herbal medicines which is less harmful to the body and comprised of less chemicals as compared to contemporary medicines might possess higher healing capacities and thus blindly brushing them off as uncivilized methods of healing is a terrible idea. Ning calls for the review of these sources of healing and emphasizes on the need to focus on healing as the end result and not as a competition of superiority. The author's assessment of homologies in biomedicine and CAMs shows that there is a need to encompass these methods in contemporary medicine.

The linkage between biomedicine and contemporary CAM creates a link between these approaches as healing capacities. Regardless, the author still asserts clinical medicine is a field that need to be embraced and appreciated since it has improved the health of most people. Vaccines for instance, have not been criticized as sources of healing power since they involve the use of the body's immunology to create resistance to certain ailments which thus proposes that the possibility of these unconventional methods, coupled with clinical medicine would have or would exhibit much better results as compared to primarily focusing on clinical medicine as the sole source of health and immunity among people.

1.13 Why CAMs are not popular

Most people who believe in CAMs as a treatment alternative understand the healing capacity this method has. However, science, which is based on facts and not the possibility of healing, focuses on more "scientific" approaches to solve any given problem. In the world of medicine, the main role is not to develop solutions to countless problems using a superior way, but rather solving the problem through whatever means. Basing one's arguments on facts shows prove, but not all solutions can be proven. Regardless, science and medicine are disciplines that have had positive results from their previous assessments and their problem solving skills. And on such an argument it is evident that people might argue that science is based on factual truths and until CAMs are scientifically proven to induce healing, the acceptability of the method has been constricted.

However, various people in the contemporary society understand that since the invention of medicine as a field, instead of more cures being developed, more diseases have emerged. The reliance on medicine has increased in the United States and everywhere else in the world. The advertisement for drugs and the marketing strategies used by people to popularize conventional medicine and scientific medicine has steadily increased in the past few years. As such, convincing people otherwise would be one of the trickiest tasks to people who understand the healing capabilities of CAMs. As such, the only way through which these methods can be introduced to the world and popularized is through the definition of these methods as complementary, which are to be used alongside scientific medicine to foster quicker healing.

Regardless, this does not present a solid argument that all other unconventional healing processes are ineffective. In fact, there is a higher possibility that the world health issues in the world today can be solved through embracing these methods as the sole sources of medicine. Anthropology presents a chance for alternative medicine with higher levels of success to be discovered. Some "uncivilized" tribes lack medical ports or hospitals within their communities yet they have longer life spans than we from the civilized world. The efficiency of traditional methods in improving health, such as yoga and acupuncture presents a possibility that there are other medicinal products out there with much superior healing powers as compared to contemporary medicine. However, physicians and doctors need not be alarmed, since some problems in the world are absolutely incurable using these methodologies. The levels of capitalism and competition need not hinder the population from becoming healthier if they are focused on creating a healthier population. Any method out there that is efficient in enhancing immunity should be given to the world.

2 Placebo Effect and CAMs

2.1 The Placebo Effect

Generally speaking, a placebo is often thought of as a "sugar pill" or a "dummy pill" (Bowling, 2010). In a more formalized setting, a placebo is understood to be a form of therapeutic intervention which does not have any known effect for the condition for which it is administered. In this regard, Donal&Larimore (2006) describe the placebo effect as the comportment in which the professional bedside manner or a patient's beliefs influences the recovery process of the patient in question. Therapeutic measures that induce the placebo effect have no intrinsic therapeutic value, and they are often designed with this goal in mind.

Virulent opinions surround the use of placebos and the value of the emergent placebo effect within clinical circles. Thompson, Ritenbaugh & Nichter (2009) perceive the placebo effect assomething which has therapeutic value under certain circumstances but which needs to be controlled and minimized in others. According to tem the placebo effect is useful in maximizing patient improvement and recovery. However, it presents differing degrees of success in the healing process and needs to be controlled and minimized, especially as relates to clinical research since it would only serve to confound the perceived efficacy of the treatment modality under study.

2.2 The Placebo Response

Despite the controversy attached to placebos and the resultant placebo effect, the placebo response is a valuable element in the process of testing new drugs. When a new drug is rolled out, it is administered to test subjects alongside a placebo that has not medicinal value. If the test subjects who took the placebo improve or fail to improve as much as those who took the drug under testing, then the new drug is dismissed as ineffective. However, this approach is based on the assumption that a placebo cannot induce as much of a response as a drug with medicinal value, which is a controversial assumption (National Institute of Health 2012). According to the National Institute of Health (2012) the observation that a placebo can induce as much of an effect as a drug should be used as a basis for studying the dynamics of the placebo effect, rather than for dismissing new drugs as ineffective.

In essence, the National Institute of Health notes that although the placebo response is a dynamic concept which cannot be explored in its entirely, there exists base facts upon which a study of the placebo effect may be based:

- a) That the placebo response is in most cases ever-present. Current statistics by the National Institute of Health indicate that at least a third of the symptoms in almost all illnesses or conditions improved when patients were given a placebo in place of conventional medication.
- b) That the placebo response spans numerous dimensions and that its manifestation can be significantly dramatic. The Institute asserts that the placebo response can be used to understand the dynamics of mind-over-body concepts that have been proposed for hundreds of years.
- c) That the nocebo response (the negative response that occurs when a placebo is administered) can be as dramatic as the placebo response. The fact that the placebo effect can have both positive and negative connotations largely supports the place of the placebo effect as a force to reckon with, especially in the context of medical trials.
- d) That the nocebo response puts into question what is biologically known as the "natural course" in the development and escalation of a disease.

These facts largely call for the conduction of more research into the value of the placebo effect and response, especially since an innate understanding of these constructs may change the theories upon which contemporary medicine is based. The placebo response also highlights the essence of the physician-patient relationship in the healing process and gives reason why this relationship needs renewed interest from medical practitioners.

2.3 Placebos and Alternative Medicine

In order to understand the value of the placebo in alternative medicine; whether it plays any significant role in the healing process or whether it is central to this healing process as hypothesized, it is essential to understand:

- a) The healing process
- b) The nature of patients who seek alternative therapies

The correlation between these two constructs can be used to infer whether or not placebos are central to the healing process of alternative medicine. If the healing process involves some form of non-scientific element (such as non-medical reassurances) which are continually and primarily emphasized in alternative medicine, then the placebo effect takes a significant amount of dominance in such surroundings. In addition, if the nature of patients who seek alternative medicine is such that they are not usually ill per se, then it can be hypothesized that a range of medical gestures (which have no medical value as such) would be sufficient to make them better, thus highlighting the value of the placebo in alternative therapies.

2.4 Efficacy of Placebos and the Placebo Effect

The efficacy of the placebo has for long been a topic of interest among medical practitioners and the general practice. Some of the earliest, scientific trials that were conducted towards the determination of this end were conducted by Dr. Lanza in the early 1990s and published in an issue of The American Journal of Gastroenterology. The study involved 300 patients who were suffering from ulcers and it was designed to test the effectiveness of a conventional drug for treating the condition, Zantac, against a newer drug that had been developed, Prevacid (Moerman, 2002). The study first ascertained that each of the patients was indeed suffering from ulcers through the use of a range of tests from each of these subjects were randomly assigned one of the drugs. The patients did not know who among them got which drug. Four weeks into the trial, about 65% of the patients who used Zontac were healed while 88% of those who took the new drug also got better. However, unknown to the patients, 33 of them had been taking an "inert" pill; a placebo which had no medical value. Moerman (2002) asserts that about half of the patients who had been prescribed the placebo were healed of ulcers within the same time frame as the other subjects. While Dr. Lanza did not discuss the findings of the placebo at length, Moerman asserts that it has for long been known that placebos frequently enable people to get better.

However, outside of these clinical trials, scientific data on the efficacy of placebos in promoting the health and wellbeing of patients has been under constant dispute. According to Maddalena (2005) the effectiveness of the placebo effect can be related to that of psychotherapy. Although, both constructs are undermined by the fact that scientific proof of their efficacy has been elusive. Psychotherapy in particular is difficult to test since the institution of controls cannot be achieved though any valid scientific means. In addition, the psychotherapeutic environment, just like that of the placebo effect, is complex, making it difficult to account for all the factors involved in the interplay. The complexity of these constructs is highlighted by the fact that, although there are more than 250 schools that are dedicated to the study of psychotherapy in the United States, data that supports the effectiveness of base theories for the practice of this therapy is still scarce.

The Value of the Placebo in Alternative Medicine

Essentially, the correlation between the high levels of anxiety that are notable in patients who seek alternative therapies and the corresponding finding that placebos work best in subjects with high levels of anxiety largely points out to the central role that the placebo effect plays in the healing processes of alternative medicine. From another standpoint, the

placebo effect may be understood as being influenced by the nature of the interpersonal relationship between the patient and the physician in the alternative therapy setting - just like the placebo effect in the clinical setting is increased when patients perceive their primary caregiver as warm.

According to Muskin (2008) people who resolve to seek alternative medicine do so to complement conventional therapeutic interventions or most commonly, as a last resort for a pre-existing condition that conventional medicine does not address adequately. As such, they seek alternative therapeutic interventions with the expectation that their condition will improve, or get resolved altogether. Given this setting, the medication that they receive from the alternative physician is bound to come with positive results, regardless of the medicinal content contained therein. This is because the placebo effect is amplified in such a setting. Harrington (2010) asserts that a positive placebo effect is bound to occur more often in patients with a combination of free-floating anxiety and improvement expectations. The overlap of the expectation of improvement with other positive predispositions such as optimism, faith and enthusiasm is bound to stretch the placebo effect even further (Harrington, 2010).

2.5 How effective is the Placebo effect

Placebo effect is a medical treatment methodology used in expanse in contemporary medicine. The placebo effect as a form of treatment is based on deception, which not only improves the medical conditions of the patients applying it but also deceives them into self-treatment. Since its inception, placebo effects not only focus on the disease but also the mind state that the patient is in. for instance, if a patient think or believes that he is sick, the mind somewhat makes the patients believe and the body to view the effects of the ailment to manifest themselves on a patient's body. This mode of treatment has had some critical and relatively bad receptions. For instance, in most cases the placebo effect is viewed as a strategy that not only makes it difficult for patients to heal, but have also been termed by some as relatively unethical. The question still lies in how efficient the placebo effect is and its influence on patients.

Commonly, the placebo effect is used in most medical research journals and projects as a control mechanism which is used to identify the various causative agents of a new or an existing ailment. The drug which is administered to subjects is not only focused on curing the ailment but also the assessment of side effects and their influence on the human body. The placebo effect, unlike other medical practices does not work on testing subject who are not

human. The placebo effect is thus not only a medical or a clinical philosophy that is widely applied to 'trick' patients into self-healing, but also a psychological drug that is used to assess the functionality of the human brain, assessing its performance and its set limits to curativeness (Thompson, Ritenbaugh & Nichter, 2009).

Placebo effects have been used in previous generations of medicine for centuries (Thompson, Ritenbaugh & Nichter, 2009). It has mainly been applied in fields where the doctors have little information of diseases as a clinical research tool to understand a given ailment. Placebos have been known to give patients hope and trigger some innate healing capacity within the patient or subjects of an experiment. Placebo effects have been noted to evoke positive outcomes in all healing encounters where the method has been applied. The success of placebo effect has thus prompted researchers to investigate the psychosocial and physiological mechanisms which underpin the method. A *placebo effect* is overall or the average response from a placebo test on a group of people, whereas the *placebo response* is the general change in the symptoms exhibited by an individual after a placebo process has been administered to them.

Placebo effects are thus assumed as one of the most influential Complementary and alternative medicine that has widely been used by practitioners in almost any field to test out new drugs and solve existing medical problems that have risen in the past. The clinical use of the methodology has proven to be one of the most influential fields which this drug is used in. Additionally, its influence on clinical trials has also resulted in more medical and pharmaceutical products being derived. Additionally, the invention of the placebo effect several centuries ago paved way to the introduction and development of alternative treatment methods that employ the use of no drugs such as acupuncture and hypnosis (Thompson, Ritenbaugh & Nichter, 2009).

Despite its positivity in results, the application of the placebo effect should not be limited to trial versions of the drug. Several ways have been noted to influence the efficiency of the placebo effect in practical terms. The consent process, increased therapeutic attention and surveillance, increased self-surveillanceare are some of the most critical features that influence the outcome of the placebo effect However, some people contend the efficiency of placebo effects that have been reported previously arguing that the placebo effect and the verum effects are equated to the placebo drug administration, which ignores other aspects such as synergy and individual perceptions (Thompson, Ritenbaugh & Nichter, 2009). Caspi and Bootzin (2002) propose a new methodology in clinical trials that can be used to evaluate

the success of placebo effects where the focus is not only solely on the drug being tested, and the placebo effect, but rather the new methodology proposes the use of a third arm, which is the no treatment, where a subject with the same ailment in research does not receive any form of treatment.

However, the placebo effect has been largely attributed as a more effective way to administer treatment as compared to most CAM methods such as homeopathy, herbal treatments and acupuncture. A strong placebo effective, derived from the use of a placebo component which is deemed as an active drug, is more efficient than CAM models, which have been deemed to have no benefit to the human immunity. Powerful placebo effects that are derived from the application of an active placebo drug has been reported to be very effective in that there is a placebo effect that is equivalent to any physician-patient encounter. Such an argument thus promotes the wide application of the placebo effects by clinical physicians in virtually all medical dilemmas.

The use of placebo on a large scale has largely been affected by the media. The perceptions portrayed by the media in placebo treatments as directed by countless media forums deems placebo an inefficient treatment method. The use of placebo on a large scale thus has been regulated by the media constraints which not only present placebo as an inefficient field but rather a forum that mainly capitalizes on exploiting the weakness of the patients who will pay a high price for no medication at all, thus limiting it to clinical experimentation. However, placebo treatment is an immunity boosting methodology which would make the population healthier thus deeming pharmaceutical companies, some of the most profitable corporations in the world, inefficient, which thus shows the great opposition from pharmaceutical companies from the administration of placebo on a large scale (Caspi and Bootzin, 2002).

Double-blind RCTs (Randomized Control Tests) which focuses or popularizes the use of placebo effect on subjects, has been argued to fail meeting the gold standard for evidence-based treatments. Placebo effect, though termed as dummy pills, have positive impacts on various medical conditions ranging from minor medical conditions such as ulcers and pain, to complex medical cases such as depression. The efficiency of placebo effects is mainly covered from the results indicated in an RCT. The testing of placebo administration is purely focused on spontaneous remission of symptoms, deviation from the mean symptoms among the users, patient and doctor reporting biases and co-intervention (Lund et al, 2014).

In a research conducted by Lund et al (2014) the total treatment exhibited from using active drugs to cure an unknown ailment and the application of a placebo drug had more positive outcomes as compared to the active drug. As such, the consideration of the efficiency of placebo should thus pave way for the inclusion of new placebo uses on the large scale, particularly in the populace and not limited to the medical applications of the ailment. Though most physicians predict the effects of placebo medicine before administering them, they always surpass the expectations, which thus deem the methodology as unreliable and unpredictable.

Low or weak placebo drugs have varied results as compared to powerful placebo drugs. The stronger the placebo being used, despite the similarity in their influences, the higher the rates of positive effects reported. In such a context, strong placebo drugs mimic the predetermined side effects and its influence on the cognitive responses on the patients thus making their self-healing or the innate healing capacities in them stronger. Regardless, when compared to drugs administered to patients with known ailments, the results from the drug was more positive and more effective as compared to the placebo drug in question. This approach thus proposes the administration of the placebo pills and tablets to solely unknown ailments until a cure for them has been developed.

Conclusion

In essence, although alternative medicine has been around for centuries, it is yet to be accepted as part of mainstream medicine. At its most basic, alternative medicine includes therapeutic interventions that are not taught or practiced in medical institutions, but which are practiced in alternative settings. Despite the opposition that alternative medicine has received over the years from the conventional medicine establishment, the popularity of alternative therapeutic interventions has grown to unprecedented heights over the course of the latter parts of the 20th century. A number of reasons have necessitated the increase in popularity of alternative interventions, with the most visible being the high level of personalized care that alternative medicine places on patients, as opposed to the increasingly distant touch that conventional medicine is gaining.

However, despite its increased popularity, alternative medicine has been riddled with controversies and concerns over its practice. Safety concerns have especially been rife in view of the fact that most of the therapies pursued under alternative medicine are not subjected to the same stringent analysis as conventional medicine therapies. In addition, practitioners of conventional medicine have raised red flags over the fact that the efficacy of alternative medicine has not been documented in length, and that most consumers of alternative medicine are not aware of the potential impact of this medicine. These concerns have further been compounded in light of the finding that the use of alternative medicine alongside conventional medicine may have fatal side effects.

Central to the controversy surrounding alternative medicine has been the assertion that the placebo effect largely accounts for the working of this medicine. Although the placebo effect has demonstrated positive results in clinical trials, the idea that alternative medicine could be working solely because of the belief that consumers hold has been received with mixed feelings. In essence, although alternative medicine possesses a significant amount of medicinal value, the placebo effect has significantly contributed to its efficacy. Largely, this is because through the emphasis that it places on a close physician-patient relationship, the alternative medicine setting provides an environment upon which the placebo effect is maximized.

The controversy that surrounds alternative medicine has attracted stringent legislation from a host of countries around the world geared towards controlling this medicine. Countries in the West have recognized the value of alternative medicine and allowed for the practice of

the same upon proof that an alternative physician has met the set minimum requirements. On the other hand, a host of other counties, especially in the developing world, have adopted a monopolistic healthcare system that has limited the practice of alternative medicine. However, although such legislation has differed significantly across national boundaries, there seems to be consensus that alternative medicine needs to be explored in its entirety through qualitative research so as to develop a more accommodative policy for its practice. . It is beyond doubt that the popularity of CAM has skyrocketed in the past few decades, and it is almost unbelievable to see that a stunning 20% of medical practitioners were labeled as alternative in the beginning of the 20th century. Although increasing in popularity, many questions remain unanswered, and many of the people that use it do not necessarily have a clear idea and understanding of how effective it really is. A definite lack of scientific research and proof is still missing from a large part of the field as well as questions about its safety. It seems that the human part is very important when it comes to alternative approaches to getting better. A practitioner that is gentle and takes time makes the patient feel at ease, seems to be almost a type of medicine on his own. Maybe its time we pay more attention to the human aspect and the emotions that are involved in not being well. What if the placebo effect is more about healing and nurturing the soul and then let it heal the body as a consequence. The idea of the placebo simply as an "inert sugar pill" is outdated and simply incorrect, because, how can you say that something is inert when it does indeed seem to help the patient to heal. Just thinking about getting better can have a positive effect. There is also room for debate when it comes to the morality of CAM and placebos. Is it under any circumstances wrong to give a patient a placebo? What if it is for clinical depression and that patient commits suicide? The doubts and fears that traditional doctors have are understandable, since using treatments that have not been clinically proven could land them in serious trouble, like malpractice suits. As the Hippocrates oath states, first and foremost, they are not to do harm. But I believe, there are many positive healing aspects that are still not being fully discovered because of those fears.

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