



Recommended Ways to be Assertive and Committed in Overweight and Obesity Control and Prevention: A Review

H. I. Wankasi^{1*}

¹*Department of Public Health; Bayelsa State College of Health Technology, Nigeria.*

Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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Systematic Review Article

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ABSTRACT

Aim: This systematic review article recommends how one who yearns and willing to control/lose weight in order to prevent obesity can be assertive and committed to the intended course.

Study Context: The study started at the last lap of study in United Kingdom 2014 and concluded in Nigeria 2015. The recommendations herein are not for a particular setting, as these may be useful to anyone if the outlined principles are adopted by all affected persons irrespective of ethnicity, gender and location.

Methodology: A critical online searches were conducted to identify existing strategies and interventions designed to reduce the trend of obesity. Materials comprising of journal publications from Pub MED, Science Direct, NIH websites, several books from University and College libraries, personal books as well as books from charity shops covering period from 1992-2014 were accessed and explored.

Findings: At least 70 articles were accessed, of which 54 were used as sample. Out of the 54 materials, 77% stressed regular exercise, adequate sleep and selective/control diet as obesity preventive/control measures, 14% emphasised exercise, diet rich in vegetables and drugs, 6% said avoid stress and ensure communication, while 3% articles advocate diet and surgery as well as reports on nursing staff counselling clients and regular exercises.

Conclusion: Based on the relevance of the existing programmes, this paper postulates the need to

*Corresponding author: E-mail: wankasihelen@yahoo.co.uk;

tackle the obesity scourge by applying these two leadership concepts (assertiveness and commitment) to enhance effectiveness (achieve desired weight reduction) of these already existing weight reducing activities.

Keywords: Assertiveness; body mass index; commitment; obesity; overweight; theories.

1. INTRODUCTION

Sequel to the growing concern of the prevalence of overweight/obesity and its attendant consequences that affect humanity [1]; This article recommends to anyone who yearns to control or lose weight on how to be assertive and committed (AC) in implementation of the weight reduction or weight control initiatives. These recommendations become imperative following several unsuccessful weight control methods adopted by individuals and also to stakeholders who intend to effectively organise and implement weight reduction programmes in any setting and at any level. With the mindset that these recommendations will further augment and motivate their effort to ensure successful programme outcome.

To control weight, from time unmemorable, individuals and groups have embarked upon several weight reduction programmes, according to some authorities these measures range from dietary, drugs to exercise and others [1]. In spite of these line-up, same writers corroborate and added that obesity persists globally affecting anyone irrespective of one's social status, sex, age, ethnicity, creed or religious affiliation [1]. The persistent obesity trend suggests, there is nothing much anybody can do (no programme can be introduced that will not have bearing with the existing activities) other than to espouse AC while adopting the existing programmes. That is the existing programs are good enough to cause the desired change. However, before this article makes any meaningful input on this issue (lofty policy recommendations on how to be assertive and committed) that will cause the desired positive change, it intends to highlight briefly on the negative impact obesity creates on human being, the global prevalence rate and state the methodology employed to arrive at AC as key concepts to prevent obesity, state the findings (different preventive methods from different authors/ books and journals), while the debate will underscore theories underpinning AC before the discussion of how to be assertive and committed.

The obesity appalling cost on the health sector in global economy and on the sufferer's health is

huge [2], for instance, the NHS in Europe spends at least £10 billion per annum, while America spends over \$150 billion annually on treatment of obesity related ailments [2]. Not only that, available data estimates 300,000 yearly premature deaths due to obesity related complications [2]. In corroboration, another empirical study affirms that, not only does obesity have negative impact on global economy, but it is a significant cause of problem in body systems, it elevates mortality and morbidity [3]. That could probably be the reason why the NHS and other health institutions spend so much on patients suffering from obesity complications. For instance, the author cited the burden obesity creates on the endocrine system; obesity precipitates type 2 diabetes due to insulin resistance, infertility due to polycystic ovarian syndrome, amenorrhea and hirsutism [3]. At the cardiovascular system, it induces hypertension, deep vein thrombosis leading to varicosities and cerebro-vascular diseases and ischaemic heart disease [4,5]. Yet others believe obesity results in respiratory system malfunctioning; breathlessness, hypoventilation and other pulmonary problems secondary to excess adipose tissue overlying the chest cage [1]. It impedes gaseous exchange, vital capacity and expiratory volume decrease that result to low arterial oxygen tension, high carbon dioxide tension and sleep apnoea. [6], At the genitourinary system, it results in stress incontinence, gall bladder stones and other related problems [7]. Similarly, obesity affects the muscular-skeletal and gastrointestinal systems; it is a major cause of hypercholesterolemia and some cancers in human [8]. The emotional or psychological consequences of obesity vary from persons to persons, but quite often some obese have low self-esteem, binge-eating, night eating habits, lacks social skill, weak willed and blame others for their predicament [9]. These figures assert the affirmation of other authors in "Prevalence and associated co-morbidities of body mass index ranges"; in the International Journal of medicine described obesity and overweight is the fifth leading risk for global death; causing at least 7%-41% of cancers and 2.0 billion people world-wide of overweight and obesity associated morbidities [5].

Obesity occurs when the energy intake far exceeds the energy expenditure thereby causing overweight overtime [9] and it is widely expressed by a number of methods these include: use of height and weight tables, skin fold thickness [9]. Other methods are; hydrostatic weighting, measurement of oxygen intake and bio electric impedance analysis and the body mass index (BMI) in appropriate ratio of weight to height [10].

As regards the prevalence of overweight and obesity, experts view it to be highest in America, Europe and South East Mediterranean (62% for overweight in both sexes, and 26% for obesity), out of these figure 50% of women were overweight, but in South East Asia records 14% overweight in both sexes and 3% for obesity [11], For all three of these regions, roughly half of overweight women are obese (23% in Europe, 24% in the Eastern Mediterranean, 29% in the America) [12]. In all WHO regions including the Sub-Saharan Africa, women were more likely to be obese than men. Eastern Mediterranean and South East Asia, women had roughly doubled the obesity prevalence of men attributable to hormones (oestrogen and progesterone) responsible for childbirth [13].

In same vein researchers affirmed 35% of adults aged 20+ were overweight (BMI ≥ 25 kg/m²) of which 34% men and 35% of women [13]. The worldwide prevalence of obesity has nearly doubled between 1980 and 2008. Same report in 2008 states 10% of men and 14% of women in

Table 1. Health effects of obesity on body systems

System	Effects
Endocrine system	- Precipitates type 2 diabetes
Reproductive system	- Polycystic ovarian syndrome - Amenorrhea and - Hirstuism
Cardio-vascular system	- Hypertension - Deep veins thrombosis - Varicosities - Cerebro-vascular diseases
Respiratory system	- Breathlessness - Hypoventilation - Low vital capacity and expiratory low arterial oxygen /carbon dioxide tension and sleep apnoea
Urinary system	- Stress incontinence - Gall bladder stones
Muscular-skeletal system	- Arthritis
Gastro-intestinal system	- Hypercholesterolemia - Cancers
Emotional consequences	- Low self-esteem - Binge eating - Night eating - Lacks social skills - Weak will

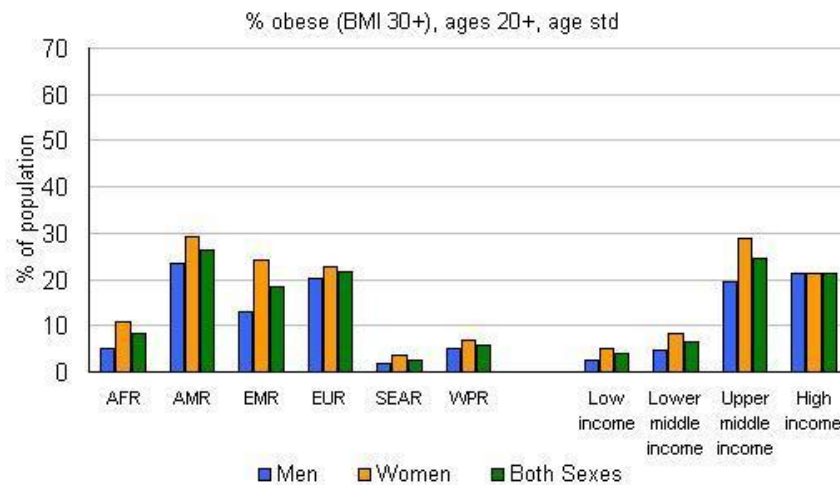


Fig. 1. An excerpt from global health observatory trend in obesity [13]
 AFR- Africa, AMR- America, EMR—East Mediterranean, EUR- Europe, SEAR- South East Asia Report, WPR- West Pacific Report

the world were obese (BMI ≥ 30 kg/m²), compared with 5% for men and 8% for women in 1980 are obese [13]. An estimated 205 million men and 297 million women over the age of 20 are obese [14]. In other words, more than half a billion adults worldwide are identified to be obese [14]. Scholars further observed the raised BMI prevalence with income level of countries stating that, the prevalence in high income (HI) and upper middle income (UMI) countries was more than double that of low income (LI) and lower middle income (LMI) countries [14]. The same paper also affirms that, more than triple from 7% obesity in both sexes in LMI countries to 24% in UMI countries and that women's obesity was significantly higher than men's with the exception of HI countries where it was similar [14]. In low and MI countries, obesity among women was approximately double among men [14].

2. METHODOLOGY

This study started at the last lap (semester) of study in 2014 in the UK, had a break, then continued and concluded in 2015 in Nigeria. What this implies is that, the recommendations herein are not meant for a particular setting, age, geographical location or sex, as these suggestions may be useful to everyone irrespective of status. The accessed materials (population) carried obesity subject matter generally. However, the reviewed were basically on weight reduction and prevention activities regardless of the context the data emanated from, then those articles that never had weight reduction measures even though it discussed obesity were excluded in order to narrow it down to the interest subjects. The study articles included were from Europe, Sub-Saharan African, South East Asia and America, meaning it covers every region.

The following data bases were searched critically, online, offline as well as books covering period from 1992-2014 except one article that was found relevant to the study dated back 1976. The sites were Medline (Pub Med), science direct journal articles, from London South Bank University library, Oasis Charity bookshop, personal books, College of Health Library, NIH website, gazette, white paper, grey literature and television weight reduction program. At least 70 articles were accessed, but 54 were preferred

and reviewed as sample for obesity reduction or prevention interventions, while others were discarded. As earlier said, the major areas that concerns obesity reduction were noted.

3. FINDINGS

Some of these articles used while in the UK could not be accessed; these are not all that were reviewed. However, out of the 54 materials, 77% stressed regular exercise, adequate sleep and selective/control diet as obesity preventive/control measures; 14% emphasised exercise; diet and drugs; 6% said avoid stress and ensure communication while 3% articles advocate diet and surgery as well as reports on nursing staff counselling clients and regular exercises [12] and [1]. These results simply imply that, the core weight prevention and control measures are adopted by all those who had made frantic efforts to reduce weight by themselves or are been told to do so by a program designers (personal physicians, dieticians and other fitness/ wellbeing programmers). However, the effectiveness of these programmes were not ascertain as this was not the aim of study. Again, the search also identified recommendation from position paper in preventing and treating obesity published in the Journal of adolescent health. The writer emphatically enjoined "*all adolescent healthcare advocates would have to work assertively to achieve the needed change*" [15]. Although this article does not intend to flout the preposition of [14], rather, it builds upon their work. Therefore, these suggestions in this article are made with the view to encourage those concerned to work assertively and with utmost commitment, these are to be adopted and followed by all age groups while trying to reduce or prevent weight, rather than for adolescents alone as recommended by [15].

AC are hypothesized to be best options given that the traditional programmes so far designed as indicated at the table above are appropriate to cause the desired weight loss, yet the impact is sluggish or in some instances not palpable. Meaning, there is an area implementers or beneficiaries are not getting it right. And considering the fact what is not right cannot be ascertain, AC are viewed to be appropriate measures to reduce and prevent overweight and obesity.

Table 2. Details of some overweight and obesity studies systematically reviewed and preventive/control measures found

S. no	Author's name	Year of study	Material accessed/reviewed	No. of data	Findings (type of obesity prevention intervention)
1	Alexander and Schroeder[17]	1976	Textbook	1	Theory of assertiveness applicable to study
2	Cawson et al.[8]	1992	Pathological mechanism of diseases	1	Diet, exercise and surgery
3	Watson and Royle [9]	1992	Medical surgical nursing	1	Diet exercise and surgery
4	Rodley [19]	1993	UN special rapportuer	1	Theory of commitment applicable to study
5	Kaur et al.[5]	2015	Research paper	1	Co-morbidities of obesity
6	Mac cane and Huether [10]	1994	Patho- physiology	1	Avoid starvation, regular but little meal at a time
7	Dyer [4]	1994	Traditional treatment does it work?	1	Sleep, exercise and drugs
8	James et al.[6]	2004	Obesity epidemic, future preventive strategies	2	Diet, exercise and liberal fluid intake
9	Kohn et al.[15]	2006	Journal of adolescent health-position paper	2	Preventing obesity; surgery and counseling
10	Jean-Pierre [7]	2006	European heart journal	1	Abdominal obesity; diet, exercise and more water intake than fruit juice
11	NOF[3]	2006	Gazette- National obesity forum	1	Impact of obesity; health education on diet, exercise and drugs
12	Gupta & Ghai [11]	2007	Textbook-prevention/ social medicine	1	Obesity: causes, prevention; diet and exercise
13	Park[13]	2007	Textbook-prevention/social medicine	1	Obesity: causes, prevention; counseling and diet
14	Kosier, et al.[1]	2008	Textbook-fundamentals of nursing practice	1	Obesity: causes, prevention, BMI etc-moderation, activity, avoid starvation, counseling
15	Ikenyiri & Thom[15]	2010	Textbook-Family life & Emerging health issues	1	Assertiveness
16	NASO[14]	2010	Summary report-	1	Obesity prevention
17	Global health observatory[13]	2010	Position paper-	1	Obesity situation; moderation in diet exercise,
18	LSBU[18]	2012	Coincide career guide-textbook	1	Commitment
19	BBC[2]	2013	News report-	4 times	Effects/prevention of obesity; diet, exercise, rest
20	Derby[21]	2013	UK, television program	1	Weight management-exercise/diet and communication
21	National Institute of Health[20]	2014	Weight control article	1	Weight reduction/control-exercise diet, avoid stress and adequate rest

4. DISCUSSION

In this article, these words (assertiveness and commitment) are inextricable based on their relevance and what these words present. Although not bearing same literal meaning, but in this instance, both words could serve to demonstrate the significance of the idea behind the issue at stake.

Literally, assertiveness is described as the ability of someone to express his or her opinion without infringing into other people's right [16]. In view of the fact that weight control is an uphill task for the affected he or she does by setting up one's own priorities, being reasonable and determine to venture into an overwhelming weight reduction action. However, if the obese or institutions responsible for weight reduction focuses at specific problem and decides to set up the routine control activities with determination without infringing into other people's right, obviously they will easily achieve the purpose for which assertiveness is employed, hence, the decision for this article to consider the theory of assertiveness to support this point.

The theory of assertiveness as propounded by [17] is on the premise in this article that, every individual possess some basic human rights to be involved in an activity, right to have one's need and the right to make mistakes without feeling guilty. In this context, the policy makers or implementers at all level before embarking on weight reduction programme should unequivocally agree with the targeted audience or person on what is involved in other not to impose programmes against the beneficiary's will. The idea is to gain their cooperation and support which are essential for uninterrupted program participation. Likewise, another idea is that, during implementation of weight reduction activity, rather than being frightened and uncertain about the outcome, when errors are identified (s) he should take advantage of the error made to review the process and re-strategize.

Again, bearing in mind the theory of assertiveness has positive correlation ship with behaviour and communication with other people, in view of that fact, those who yearn to reduce weight must cultivate the habit of constantly communicating with interest groups to eschew problems that might result from lack of understanding in the process. Accurate understanding through effective communication

is essential for effective weight prevention and control programme in a direct, honest and appropriate manner [18]. Understand the process and procedures; understand diet and other programs aimed at achieving the set weight reduction goals.

On the other hand, commitment is absolute dedication to a particular course of action that one truly believes [19]. This the group, individual or organisation sticks to, follow up and put in the best of one's effort and ability.

In building and sustaining commitment toolbox, it states commitment as the backbone of any set goal especially in obesity control, because the greater commitment any group or individual shows in an exercise, the greater the assurance of attaining positive result [19]. Like the assertiveness, this theory could be applied to support this concept. It postulates commitment as an expression of an obligation of total support of an issue agreed upon even when you are unhappy or encounter difficulties along the line [19]. This is sequel to the fact that you have invested time, finance and other resources into this venture. This theory is applicable in this instance because, a writer believes, time and again formulated programmes sound laudable at the face value, but in real sense, implementation processes are weak, enforcement is unlikely and cost of non-compliance are low [19]. To ensure effectiveness of any weight reduction approach, stakeholders should not dwell on the challenges, rather be strengthened by the challenges to achieve the desired purpose(s) [20].

Another essence of applying the theory of commitment to reduce weight is, no doubt, weight reduction is frustrating and boring as it involves depriving oneself of activities (s) he has being indulging in for a considerable length of time. Regardless of obvious challenges that situate on the assignment, it requires interest group to show remarkable devotion to achieve set goals. Assertiveness and commitment are possible means to avert the distress, negative prejudice and stress all resulting from the looks have created on the obese and their families. Appreciable commitment to the weight reduction course would irrefutably grant legitimacy in the eyes of all, both individuals who intend to lose weight and program implementers alike. Based on the following explanations, be it an individual, group, organisations or government institutions, adopting AC would motivate others to be faithful in implementation or response to achieve

positive outcome in obesity reduction/prevention. In view of the above reasons, this article makes the following lofty recommendations.

It is apparent, AC cannot occur abruptly, but overtime, sometimes might be lifelong activity. As such, If significant success is to be attained by any of the stakeholders involved in the programme, then it needs a concerted effort and a fundamental attitude of success through; developing a positive mental attitude, ascertain the situation and have the details of programme at hand, anticipate other people's behaviour as well as identify specific behaviour the asserter would prefer (system of communication). The best ways to apply these theories are to refer to the precepts in [15,16]. Implementers are advised to assess the strengths weaknesses opportunities and treats (SWOT analysis) of the program, if need be form a coalition or a consortium without derogating each other, take unanimous decision, avoid duplicating programmes, ensure and encourage continuity. This article also enjoins implementers to show undivided AC, by being; open and clear about the mission and intended achievable goals. Likewise, relevant stakeholders should carryout regular periodic process monitoring to ascertain response of participants, carryout critical observation, review and evaluation of outcomes.

Another rightful step is to work on the situations appropriately; on food (type, quantity, quality and regularity), exercise and regular check-ups. Again, stakeholders are to maintain self-control, practice fogging that is, to assert to any truth embedded in policies, be persistent and rehearse what you are practicing repeatedly to be acquainted to the activity. Beside these, other ways of being assertive and committed to the activity are politeness with relative firmness during policy implementation, total conformity to planned process, accept helpful criticisms and express positive and negative emotions again that is: a form of communication. It is also imperative to imitate best practice: listen to success stories and eschew traditions and values that do not make sense that have hitherto promoted obesity. It will also not be out of place for the obese to identify his inner motivator and take responsibility for personal behaviour. For instance, do not be too formal in implementing programmes, allow your body to be use to your routine weight reduction programmes, in so doing you would be reminded naturally if forgotten, as you will instinctually have sense of incompleteness.

AC likewise entails making personal sacrifices, find meaning and purpose behind the target you are ensuing in order to achieve objectives and by being passionate about the mission. Another positive step in the right direction is the determination to withstand and tackle challenges. As challenge often presents in any activity and spurs one towards larger accomplishments. Again staying assertive and committed might necessitate working in synergy with others, on the part of the beneficiary, he can involve friends in order to bond to arrive one's destination.

In a weight reduction television program, the program coordinator encouraged her programme participants to have inner drive that would enable them to declare 'enough is enough of the extra calories they are moving with' and work towards shedding these excess calories [19]. This is a classical example of assertiveness/commitment, which programme stakeholders should emulate to enhance positive outcome of weight reduction programmes. Finally be committed to high fruits and vegetables intake, exercise, avoid starvation of any sort and eat little portion at a time. Likewise, drink more water than energy drinks and avoid fatty foods [20]. This article also highly recommends one to be assertive and committed to the "Six steps to healthy you" pyramid. [1] These six steps are;

- Activity; Activity is represented by the steps and the person climbing them, as a reminder of the importance of daily physical activity.
- Moderation; Moderation in intake of fatty and oily food. However, the more active you are, the more these foods can fit into your diet.
- Personalization; [1] describes as finding the right food to be taken each day to satisfy your personal desire.
- Proportionality is shown at the pyramid by the different width of the food, that is, how much each food substance to be chosen.
- Variety; the variety indicates that all food substances are needed each day for good health and.
- Gradual improvement suggests that individuals can benefit from continually taking small steps at a time of whatever activity and gradually improve on these steps, which scholars describe as 'Six steps to a healthier you [1].

These prescriptions are directed at those saddled to design and implement these

programmes and the beneficiaries. It enjoins these stakeholders to consider and redouble their effort towards being assertive and committed to guarantee the effectiveness of these interventions.

5. CONCLUSION

This article has made quintessential recommendations to obesity policy makers, programme implementers and beneficiaries of the need to be assertive and committed to the course of overweight and obesity reduction. Based on the relevant programmes in place, this paper postulates the need to tackle the scourge by applying these two leadership concepts (assertiveness and commitment) to enhance effectiveness of these programmes.

For assertiveness, it was said, there is no subjection for any person to participate in any programme. It therefore requires stakeholders to consider and respect human rights in programme design and implementation. As regards commitment, it admonished all parties to show absolute support, participation, review and update programmes to ensure effectiveness and sustainability.

This review will contribute to increase the knowledge on obesity and overweight control measures, assists in community health promotion and in a new knowledge in research.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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