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Recommended ways to be Assertive and Committed in overweight and obesity control and prevention: A systematic review

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Abstract

7 Aim-This systematic review article recommends how one who yearns and willing to control/lose 8 weight in order to prevent obesity can be assertive and committed to the intended course. Study design-The study started at the last lap of study in United Kingdom 2014 and concluded in Nigeria 9 10 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 11 location. Methodology-A critical online searches were conducted to identify existing strategies and 12 interventions designed to reduce the trend of obesity. Materials comprising of journal publications 13 14 from PubMED, Science Direct, NIH websites, several books from University and College libraries, 15 personal books as well as books from charity shops covering period from 1992-2014 were accessed 16 and explored. Findings- At least 70 articles were accessed, of which 54 were used as sample. Out 17 of the 54 materials, 77% stressed regular exercise, adequate sleep and selective/control diet as 18 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 19 as reports on nursing staff counselling clients and regular exercises Conclusion-Based on the 20 21 relevance of the existing programmes, this paper postulates the need to tackle the obesity scourge by 22 applying these two leadership concepts (assertiveness and commitment) to enhance effectiveness 23 (achieve desired weight reduction) of these already existing weight reducing activities .

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Keywords; obesity; Overweight; Assertiveness; Commitment, Theories and Body mass index.

Comment [DW1]: Keywords italicized

Introduction

- 27 Sequel to the growing concern of the prevalence of overweight/obesity and its
- 28 attendant consequences that affect humanity⁽¹⁾;this article recommends to anyone
- 29 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
- 31 recommendations become imperative following several unsuccessful weight control
- methods adopted by individuals and also to stakeholders who intend to effectively
- 33 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 36 upon several weight reduction programmes, according to some authorities these 37 measures range from dietary, drugs to exercise and others⁽¹⁾. In spite of these line-38 up, same writers corroborate and added that obesity persists globally affecting 39 anyone irrespective of one's social status, sex, age, ethnicity, creed or religious 40 affiliation (1). The persistent obesity trend suggests, there is nothing much anybody 41 can do (no programme can be introduce that will not have bearing with the existing 42 43 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, 44 before this article makes any meaningful input on this issue (lofty policy 45 recommendations on how to be assertive and committed) that will cause the desired 46 positive change, it intends to highlight briefly on the negative impact obesity creates 47 48 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 49 preventive methods from different authors/ books and journals), while the debate will 50 underscore theories underpinning AC before the discussion of how to be assertive 51 and committed. 52
- 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 hirstuism (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 muscularskeletal 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 selfesteem, 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 2.0billion people world—wide of overweight and obesity associated morbidities⁽⁵⁾.

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System Effects

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

Obesity occurs when the energy intake far exceeds the energy expenditure thereby 84 causing overweight overtime (9) and it is widely expressed by a number of methods 85 these include: use of height and weight tables, skin fold thickness (9). Other methods 86 are; hydrostatic weighting, measurement of oxygen intake and bio electric 87 impedance analysis and the body mass index (BMI) in appropriate ratio of weight to 88 height (10). 89 As regards the prevalence of overweight and obesity, experts view it to be highest in 90 91 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 92 South East Asia records 14% overweight in both sexes and 3% for obesity⁽¹¹⁾. For all 93 three of these regions, roughly half of overweight women are obese (23% in Europe, 94 24% in the Eastern Mediterranean, 29% in the America) (12). In all WHO regions 95

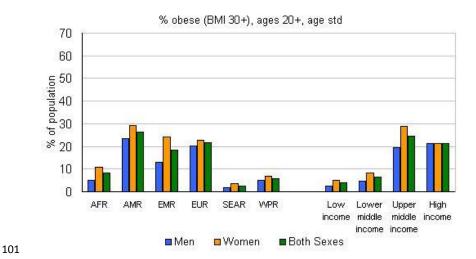
including the Sub-Saharan Africa, women were more likely to be obese than men.

Eastern Mediterranean and South East Asia, women had roughly doubled the

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obesity prevalence of men attributive to hormones (oestrogen and progesterone) responsible for childbirth ⁽¹³⁾.

Figure 1 An excerpt from global health observatory trend in obesity



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 AFR----Africa

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 AMR--- America

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 EMR--- East Mediterranean

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 EUR--- Europe

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 SEAR--- South East America Report

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 WPR--- West Pacific Report

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 the world were obese (BMI ≥30 kg/m2), compared with 5% for men and 8% for women in 1980are 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

Comment [DW2]: Elaborated abbreviations, though am not too sure if this what is required.

(LMI) countries⁽¹⁴⁾. The same paper also affirm 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⁾.

Methodology

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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 (PubMed), 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 54were 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.

Findings

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Table 1 <u>Details of some overweight and obesity studies systematically reviewed and</u>
 preventive/control measures found

SNO	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

- 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 flaw 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 lose, 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.

Discussion

Comment [DW3]: Why there are less figures and tables in most of my write ups are that, my university discourages too many figures and tables, unless it is extremely necessary. This is because, they believe, students do fill up papers with less explanation. They believe discussions are paramount in papers for publication and dissertations. However, in my sunsequent bulletins i "Il endeavour to use tables/figures to make it more presentable.

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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.

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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

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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

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consortium without derogating each other, take unanimous decision, avoid 245 duplicating programmes, ensure and encourage continuity. This article also enjoins 246 implementers to show undivided AC, by being; open and clear about the mission and 247 intended achievable goals. Likewise, relevant stakeholders should carryout regular 248 249 periodic process monitoring to ascertain response of participants, carryout critical observation, review and evaluation of outcomes. 250 251 Another rightful step is to work on the situations appropriately; on food (type, quantity, quality and regularity), exercise and regular check-ups. Again, stakeholders 252 are to maintain self-control, practice fogging that is, to assert to any truth embedded 253 254 in policies, be persistent and rehearse what you are practicing repeatedly to be 255 acquainted to the activity. Beside these, other ways of being assertive and 256 committed to the activity are politeness with relative firmness during policy 257 implementation, total conformity to planned process, accept helpful criticisms and 258 express positive and negative emotions again that is: a form of communication. It is 259 also imperative to imitate best practice: listen to success stories and eschew 260 traditions and values that do not make sense that have hitherto promoted obesity. It 261 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 262 implementing programmes, allow your body to be use to your routine weight 263 reduction programmes, in so doing you would be reminded naturally if forgotten, as 264 265 you will instinctually have sense of incompleteness. 266 AC likewise entails making personal sacrifices, find meaning and purpose behind the 267 target you are ensuing in order to achieve objectives and by being passionate about 268 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

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.

References

¹Kosier, B. and Erb, G. [2008] Fundamentals of Nursing practice; concepts, process and practice in
 Berman, A., Snyder, S. Kosier, B and Erb, G [8th edition]. Pearson Prentice Hall. New Jersey.

- ²British Broadcasting Corporation [BBC] [2013] Media report on effects of obesity on health sector.
- 316 [Available at www.bbc co.uk. Accessed 4/20/2014].
- 317 ³National obesity forum [2006] *Impact of obesity*. [online] [Available from
- 318 <u>www.nationalobesityforum.org.uk</u>Accessed 28/01/2014]
- 319 ⁴Dyer, R.G. [1994] *Traditional treatment of obesity; does it work?* Baillier's clinical endocrinology and
- 320 metabolism [online] Vol. 8(3) pp 661-688 [Available from www.sciencedirect Accessed 29/01/2014].
- 321 ⁵ Kaur, J. Singh, S. Kaur, K. [2015] Prevalence and associated co-morbidities of mass index ranges;
- 322 International journal of medicine [online] vol.3 (1): 16-21[Available from www.injournalofmedicine
- 323]Accessed 31/07/2015]
- ⁵James WPT, Rigby N, Leach R. [2004] The obesity epidemic, metabolic syndrome and future
- 325 prevention strategies. European Journal of Cardiovascular Rehabilitation. International Obesity Task
- Force [online]11:3–8. [Available from www.ncbi.gov[PubMed] Accessed 28/01/2014]
- 327 ⁶Jean- Pierre, D. [2006] *Abdominal obesity: the most prevalent causeof the metabolic syndrome and*
- related cardio metabolic risk. European Heart Journal Supplements 8 [2] [online]
- 329 [http://eurheartjsupp.oxfordjournals.org Accessed, 29/01/2014]
- 330 ⁷Cawson, R.A. Mac Cracken, A.W and Marcus, P.B. [992] *Pathologic mechanisms and human*
- 331 disease. Mosby, Missouri.
- 332 ⁸Watson, J.E and Royle, J.A. [1992] *Medical Surgical Nursing*; Baillier Tindall, St Ives.
- ⁹McCance, K.L and Huether, S.E. [994] *Patho-physiology; The biological basis for disease in adults*
- and children [2nd edition]. Mosby, Baltimore and Toronto.
- ¹⁰Gupta, P. and Ghai, O.P [2007] *Textbook of preventive and social medicine*. CBS. New Delhi.
- 336 ¹¹Park, K. [2007] *Park's textbook of preventive and social medicine* [19th ed]. Bhandi Jabalpur.
- 337 ¹²Global Health Observatory [2010] Obesity situation and trend.
- 338 [http://www.who.int/gho/ncd/risk factors/obesity]

 [http://www.iaso.org/site_media/uploads/IASO] 14Kohn, M. Rees J.M. Brill, S. Fonsesca, H. Jacobson M and Kartzman, D.K [2006] Preventing and treating adolescent obesity, a position paper for the adolescent society. Journal of adolescent health Vol. 38. Pp. 784-787 [online] [Available from www.adolescenthealth.orgAccessed 27/01/2014] 	
342 treating adolescent obesity, a position paper for the adolescent society. Journal of adolescent health	
342 treating adolescent obesity, a position paper for the adolescent society. Journal of adolescent health	
Vol. 38. Pp. 784-787 [online] [Available from www.adolescenthealth.org Accessed 27/01/2014]	1.
344 ¹⁵ Ikenyiri, E. Iily, G. Thomas, U.G [2010] <i>Family life and emerging health issues</i> ; a course book on	
345 sexuality education for adults and teens. Happy-day publishers Omoku.	
346 ¹⁶ Alexander and Schroeder [976]Theory of assertiveness	
¹⁷ London South Bank University <i>Concise Career Guide</i> [2012]. [Available from LSBU library.	
348 Accessed 30/01/2014].	
349 ¹⁸ Rodley, N. [993] <i>Theories of Commitment</i> . UN special rapporteur on torture. [online] [Available from	n
350 <u>www.law.uga.edu</u> Accessed 2/02/2014].	
351 ¹⁹ National Institute of Health, [NIH] [2014] <i>Weight control</i> . [Available from <u>www.nim.nih.gov</u> Accesse	d,

²⁰Derby, S. [2013] Slim 6 weight reduction programme; Weight management. [Available from

Comment [DW4]: Squares in references

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