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2 Recommended ways to be Assertive and 3 Committed in overweight and obesity control 4 and prevention: A systematic review 5

6 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**
9 **design**–The study started at the last lap of study in United Kingdom 2014 and concluded in Nigeria
10 2015. The recommendations herein are not for a particular setting, as these may be useful to anyone
11 if the outlined principles are adopted by all affected persons irrespective of ethnicity, gender and
12 location. **Methodology**-A critical online searches were conducted to identify existing strategies and
13 interventions designed to reduce the trend of obesity. Materials comprising of journal publications
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,
19 6% said avoid stress and ensure communication, while 3% articles advocate diet and surgery as well
20 as reports on nursing staff counselling clients and regular exercises **Conclusion**-Based on the
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 .

24

25 **Keywords;** *obesity**Obesity*; *Overweight*; *Assertiveness*; *Commitment*, *Theories and Body mass*
26 *index*.

Comment [DW1]: Keywords italicized

27 Introduction

28 Sequel to the growing concern of the prevalence of overweight/obesity and its
29 attendant consequences that affect humanity⁽¹⁾;this article recommends to anyone
30 who yearns to control or lose weight on how to be assertive and committed (AC) in
31 implementation of the weight reduction or weight control initiatives. These
32 recommendations become imperative following several unsuccessful weight control
33 methods adopted by individuals and also to stakeholders who intend to effectively
34 organise and implement weight reduction programmes in any setting and at any

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35 level. With the mindset that these recommendations will further augment and
36 motivate their effort to ensure successful programme outcome.

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

54 The obesity appalling cost on the health sector in global economy and on the
55 sufferer`s health is huge⁽²⁾, for instance, the NHS in Europe spends at least £10
56 billion per annum ,while America spends over \$150 billion annually on treatment of
57 obesity related ailments⁽²⁾. Not only that, available data estimates 300,000 yearly
58 premature deaths due to obesity related complications⁽²⁾.In corroboration, another

59 empirical study affirms that, not only does obesity have negative impact on global
60 economy, but it is a significant cause of problem in body systems, it elevates
61 mortality and morbidity⁽³⁾. That could probably be the reason why the NHS and other
62 health institutions spend so much on patients suffering from obesity complications.
63 For instance, the author cited the burden obesity creates on the endocrine system;
64 obesity precipitates type 2 diabetes due to insulin resistance, infertility due to
65 polycystic ovarian syndrome, amenorrhea and hirsutism⁽³⁾. At the cardiovascular
66 system, it induces hypertension, deep vein thrombosis leading to varicosities and
67 cerebro-vascular diseases and ischaemic heart disease⁽⁴⁾⁽⁵⁾. Yet others believe
68 obesity results in respiratory system malfunctioning; breathlessness, hypoventilation
69 and other pulmonary problems secondary to excess adipose tissue overlying the
70 chest cage⁽¹⁾. It impedes gaseous exchange, vital capacity and expiratory volume
71 decrease that result to low arterial oxygen tension, high carbon dioxide tension and
72 sleep apnoea.⁽⁶⁾ At the genitourinary system, it results in stress incontinence, gall
73 bladder stones and other related problems⁽⁷⁾. Similarly, obesity affects the muscular-
74 skeletal and gastrointestinal systems; it is a major cause of hypercholesterolemia
75 and some cancers in human⁽⁸⁾. The emotional or psychological consequences of
76 obesity vary from persons to persons, but quite often some obese have low self-
77 esteem, binge-eating, night eating habits, lacks social skill, weak willed and blame
78 others for their predicament⁽⁹⁾. These figures assert the affirmation of other authors
79 in “Prevalence and associated co-morbidities of body mass index ranges”; in the
80 International Journal of medicine described obesity and overweight is the fifth
81 leading risk for global death; causing at least 7%-41% of cancers and 2.0billion
82 people world—wide of overweight and obesity associated morbidities⁽⁵⁾.

83 *Table 1 Health effects of obesity on body systems*

Endocrine system	- Precipitates type 2 diabetes
Reproductive system	-Polycystic ovarian syndrome -Amenorrhea and -Hirsutism
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

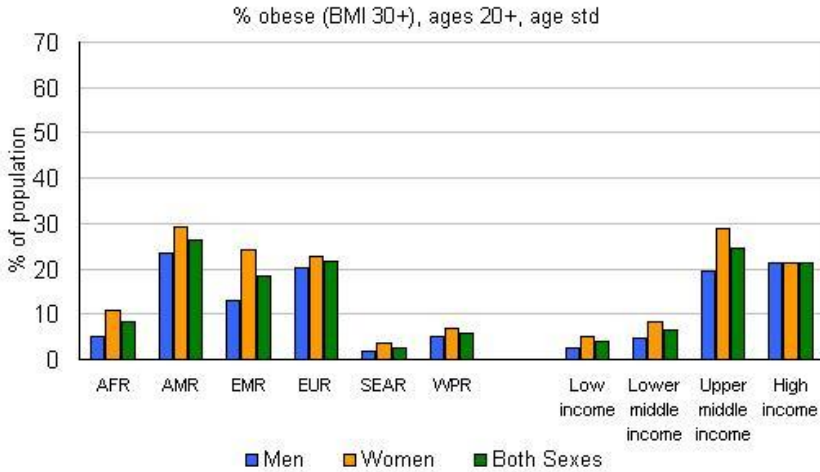
85 Obesity occurs when the energy intake far exceeds the energy expenditure thereby
86 causing overweight overtime ⁽⁹⁾ and it is widely expressed by a number of methods
87 these include: use of height and weight tables, skin fold thickness ⁽⁹⁾. Other methods
88 are; hydrostatic weighting, measurement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

91 As regards the prevalence of overweight and obesity, experts view it to be highest in
92 America, Europe and South East Mediterranean (62% for overweight in both sexes,
93 and 26% for obesity), out of these figure 50% of women were overweight, but in
94 South East Asia records 14% overweight in both sexes and 3% for obesity⁽¹¹⁾. For all
95 three of these regions, roughly half of overweight women are obese (23% in Europe,
96 24% in the Eastern Mediterranean, 29% in the America)⁽¹²⁾. In all WHO regions
97 including the Sub-Saharan Africa, women were more likely to be obese than men.
98 Eastern Mediterranean and South East Asia, women had roughly doubled the

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

101 Figure 1 An excerpt from global health observatory trend in obesity

Comment [s2]: Please add the reference for this figure



102

- 103 AFR----Africa
- 104 AMR--- America
- 105 EMR--- East Mediterranean
- 106 EUR--- Europe
- 107 SEAR--- South East America Report
- 108 WPR--- West Pacific Report

Comment [DW3]: Elaborated abbreviations, though am not too sure if this what is required.

109
 110 In same vein researchers affirmed 35% of adults aged 20+ were overweight (BMI ≥
 111 25 kg/m²) of which 34% men and 35% of women⁽¹³⁾. The worldwide prevalence of
 112 obesity has nearly doubled between 1980 and 2008. Same report in 2008 states
 113 10% of men and 14% of women in the world were obese (BMI ≥30 kg/m²),
 114 compared with 5% for men and 8% for women in 1980⁽¹³⁾. An estimated
 115 205 million men and 297 million women over the age of 20 are obese⁽¹⁴⁾. In other
 116 words, more than half a billion adults worldwide are identified to be obese⁽¹⁴⁾.
 117 Scholars further observed the raised BMI prevalence with income level of countries
 118 stating that, the prevalence in high income (HI) and upper middle income (UMI)
 119 countries was more than double that of low income(LI) and lower middle income

120 (LMI) countries⁽¹⁴⁾.The same paper also affirm that, more than triple from 7% obesity
121 in both sexes in LMI countries to 24% in UMI countries and that women's obesity
122 was significantly higher than men`s with the exception of HI countries where it was
123 similar⁽¹⁴⁾. In low and MI countries, obesity among women was approximately double
124 among men ⁽¹⁴⁾.

125 **Methodology**

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

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

144 prevention interventions, while others were discarded. As earlier said, the major
 145 areas that concerns obesity reduction were noted.

146 **Findings**

147 Table 1 *Details of some overweight and obesity studies systematically reviewed and*
 148 *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 & Ghaj 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

149 Some of these articles used while in the UK could not be accessed; these are not all
150 that were reviewed. However, out of the 54 materials, 77% stressed regular exercise,
151 adequate sleep and selective/control diet as obesity preventive/control measures;

152 14% emphasised exercise; diet and drugs; 6% said avoid stress and ensure
153 communication while 3% articles advocate diet and surgery as well as reports on
154 nursing staff counselling clients and regular exercises⁽¹²⁾ and ⁽¹⁾. These results simply
155 imply that, the core weight prevention and control measures are adopted by all those
156 who had made frantic efforts to reduce weight by themselves or are been told to do
157 so by a program designers (personal physicians, dieticians and other fitness/
158 wellbeing programmers).However, the effectiveness of these programmes were not
159 ascertain as this was not the aim of study. Again, the search also identified
160 recommendation from position paper in preventing and treating obesity published in
161 the Journal of adolescent health. The writer emphatically enjoined “*all adolescent*
162 *healthcare advocates would have to work assertively to achieve the needed*
163 *change*”⁽¹⁵⁾.Although this article does not intend to flaw the preposition of ⁽¹⁴⁾, rather,
164 it builds upon their work. Therefore, these suggestions in this article are made with
165 the view to encourage those concerned to work assertively and with utmost
166 commitment, these are to be adopted and followed by all age groups while trying to
167 reduce or prevent weight, rather than for adolescents alone as recommended by ⁽¹⁵⁾.

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

174 Discussion

Comment [DW4]: 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 'll endeavour to use tables/figures to make it more presentable.

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

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

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

199 Again, bearing in mind the theory of assertiveness has positive correlation ship with
200 behaviour and communication with other people, in view of that fact, those who
201 yearn to reduce weight must cultivate the habit of constantly communicating with
202 interest groups to eschew problems that might result from lack of understanding in
203 the process. Accurate understanding through effective communication is essential
204 for effective weight prevention and control programme in a direct, honest and
205 appropriate manner ⁽¹⁸⁾. Understand the process and procedures; understand diet
206 and other programs aimed at achieving the set weight reduction goals.

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

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

222 challenges, rather be strengthened by the challenges to achieve the desired
223 purpose(s).⁽²⁰⁾

224 Another essence of applying the theory of commitment to reduce weight is, no doubt,
225 weight reduction is frustrating and boring as it involves depriving oneself of activities
226 (s)he has being indulging in for a considerable length of time. Regardless of obvious
227 challenges that situate on the assignment, it requires interest group to show
228 remarkable devotion to achieve set goals. Assertiveness and commitment are
229 possible means to avert the distress, negative prejudice and stress all resulting from
230 the looks have created on the obese and their families. Appreciable commitment to
231 the weight reduction course would irrefutably grant legitimacy in the eyes of all, both
232 individuals who intend to lose weight and program implementers alike. Based on the
233 following explanations, be it an individual, group, organisations or government
234 institutions, adopting AC would motivate others to be faithful in implementation or
235 response to achieve positive outcome in obesity reduction/prevention. In view of the
236 above reasons, this article makes the following lofty recommendations;

237 It is apparent, AC cannot occur abruptly, but overtime, sometimes might be lifelong
238 activity. As such, If significant success is to be attained by any of the stakeholders
239 involved in the programme, then it needs a concerted effort and a fundamental
240 attitude of success through; developing a positive mental attitude, ascertain the
241 situation and have the details of programme at hand, anticipate other people`s
242 behaviour as well as identify specific behaviour the asserter would prefer (system of
243 communication). The best ways to apply these theories are to refer to the precepts in
244 ^{(15), (16)}. Implementers are advised to assess the strengths weaknesses opportunities
245 and treats (SWOT analysis) of the program, if need be form a coalition or a

246 consortium without derogating each other, take unanimous decision, avoid
247 duplicating programmes, ensure and encourage continuity. This article also enjoins
248 implementers to show undivided AC, by being; open and clear about the mission and
249 intended achievable goals. Likewise, relevant stakeholders should carryout regular
250 periodic process monitoring to ascertain response of participants, carryout critical
251 observation, review and evaluation of outcomes.

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

267 AC likewise entails making personal sacrifices, find meaning and purpose behind the
268 target you are ensuing in order to achieve objectives and by being passionate about
269 the mission. Another positive step in the right direction is the determination to

270 withstand and tackle challenges. As challenge often presents in any activity and
271 spurs one towards larger accomplishments. Again staying assertive and committed
272 might necessitate working in synergy with others, on the part of the beneficiary, he
273 can involve friends in order to bond to arrive one`s destination.

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

- 284 • Activity; Activity is represented by the steps and the person climbing them, as
285 a reminder of the importance of daily physical activity.
- 286 • Moderation; Moderation in intake of fatty and oily food. However, the more
287 active you are, the more these foods can fit into your diet.
- 288 • Personalization; ⁽¹⁾ describes as finding the right food to be taken each day to
289 satisfy your personal desire.
- 290 • Proportionality is shown at the pyramid by the different width of the food, that
291 is, how much each food substance to be chosen.
- 292 • Variety; the variety indicates that all food substances are needed each day for
293 good health and

- 294 • Gradual improvement suggests that individuals can benefit from continually
295 taking small steps at a time of whatever activity and gradually improve on
296 these steps, which scholars describe as 'Six steps to a healthier you' ⁽¹⁾.

297 These prescriptions are directed at those saddled to design and implement these
298 programmes and the beneficiaries. It enjoins these stakeholders to consider and
299 redouble their effort towards being assertive and committed to guarantee the
300 effectiveness of these interventions

301 **Conclusion**

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

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

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