



Persons with disability and the 2030 agenda of sustainable development goals: The need for organized intervention through adaptive clothing to synthesise elaborate social inclusion in Nigeria

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Abstract

This research is anchored on the anvils of a deep passion to affect a segment of the population that has been underrepresented in terms of significant policy focus across several climes. With United Nations Sustainable Development Goals' (SDG) mandate targeted at improving standard of living of the human species in an all inclusive manner globally: the quality of life and health of persons with disability, physically handicapped or disabled persons becomes a subject of major concern. Questions are often raised as to whether the quality of life of persons with disability (PWD) could be ameliorated by improving the design and functionality of their clothes. The main objective of this research paper with emphasis on the Nigerian environment is therefore, to examine the points of congruence between the need for adaptive clothing for persons with disability; the expected roles of organized agency intervention or responses as well as their impact or otherwise on the attainment of United Nations Sustainable Development Goals (SDG). Specifically, the paper interrogated the extent to which available clothing options pose a challenge to persons with disability. It went ahead and identified helpful interventions to address the array of clothing need of special needs people for purposes of achieving an all-inclusive society. The methodology adopted for the study was a survey whereby medical practitioners, caregivers and people with disabilities themselves were drawn as respondents. There was also a thorough review of secondary data from internet and other sources. The research found that special clothing is required to aid the mobility and comfort of people with disabilities, and to reduce their activity limitations. The finding justifies urgent need for agency intervention in this area with a view to improve the quality of life of this segment of the Nigerian population and for overall attainment of social inclusion and Sustainable Development Goals by year 2030 and beyond.

Keywords: Sustainable Development; Adaptive Clothing; Disability and social inclusion

Introduction

In promoting a holistic approach to sustainable development of the United Nation's global Sustainable Development Goals (SDGs), everyone's health and well-being is viewed as dependent on an adequate standard of living predicated on a decently paid work and participation in education, social and community life. Enhancing the standard of living of the people is indexed by every attempt at optimizing the health of people with disabilities. The clothing needs of these special needs people is factored as a health exigency which needs to be incorporated into the essential components of the SDGs that constitute areas of life in which people with disabilities are



particularly disadvantaged and deserves intervention. And to achieve social inclusion of this segment of people, this aspect of their human existence is critical. Further to this, we attempt to locate why and how special clothing might aid the mobility and comfort of people with disability, and to further synchronize the need for adaptive clothing and agency intervention given the economic vulnerability of this segment of people. It is in view of this that the compass of the 2030 SDGs was examined in the course of this study for possible congruence and actionable points that could be domesticated and given priority focus.

Thus, what are the implications of the health goals of the 2030 SDGs with respect to the right to life, risk and humanitarian emergencies, habilitation, and rehabilitation of people with disabilities bearing in mind that sustainable development recognizes that eradicating poverty in all its manifestations, combating inequality within and among countries, preserving the planet, creating sustained, inclusive and sustainable economic growth and fostering social inclusion are linked to each other and interdependent? This has become more imperative as the upsurge in the population of people living with disabilities continue. For instance in Nigeria the 2006 census reported that 3.3 million Nigerians have disabilities, placing the official incidence rate at 2.32% of the population (WHO, 2011). Even though there are disputations to this figure the World Health Organization estimates that “there are 27 million persons with disabilities in Nigeria, with 3 million persons with significant barriers to social and physical functioning, which is closer to the world estimate of 15%”(Wikipedia, 2020). Despite this staggering figure being a pandemic, persons with disabilities are largely excluded in social and health benefits. This could be attributed to the fact that there is a general lack of knowledge to salient areas of need. Thus this study proceeds with a view to seek a convergence on a particular area of need and concern of persons with disabilities which is their clothing need.

Conceptual and Theoretical Issues

The study conceptualizes sustainable development to recognize and factorize social inclusion as integral to societal growth and development which is synthesized as multidimensional in the explanation of social variables with regard to the 2030 Sustainable Development Goals and special needs people. Just as the framework, and theoretical paradigm of an inclusive society varies the



discourses and terminologies of social inclusion also differs. In this instant we attempt a symphony and solidarity. In essence the conceptions of social inclusion describe the ways a society's parts fit together and share values (Jeannette, 2008). It further averred that paradigms of social inclusion and its corollaries vary by political philosophy thus in United States for instance Liberals envisage social inclusion as a consequence of state-guaranteed individual freedoms to exchange property and ideas, assemble, form groups, and weave dense, plural, crosscutting networks of voluntary civil society associations while Republicans point to the social bond, the solidarity of equals and citizens to achieve the collective good. And Social Democrats emphasize the social rights of citizens to a decent minimum standard of living in return for active contributions to society and negotiated class conflicts (Jeannette, 2008). In this context social inclusion theory embraces the concern of people with disabilities and the need for them to be an active part of the social space in which they inhere. Thus it is the propositions of this study that certain factors constrain their participation in the social milieu to which we locate the clothing needs of this special need people as an essential. We then further contextualize as an ingredient of the social inclusion matrix the Maslow's Hierarchy of Needs. Thus social inclusion is evidenced as dependent on the fulfillment of certain basic needs as contextualized by Abraham Maslow. See figure 1 below

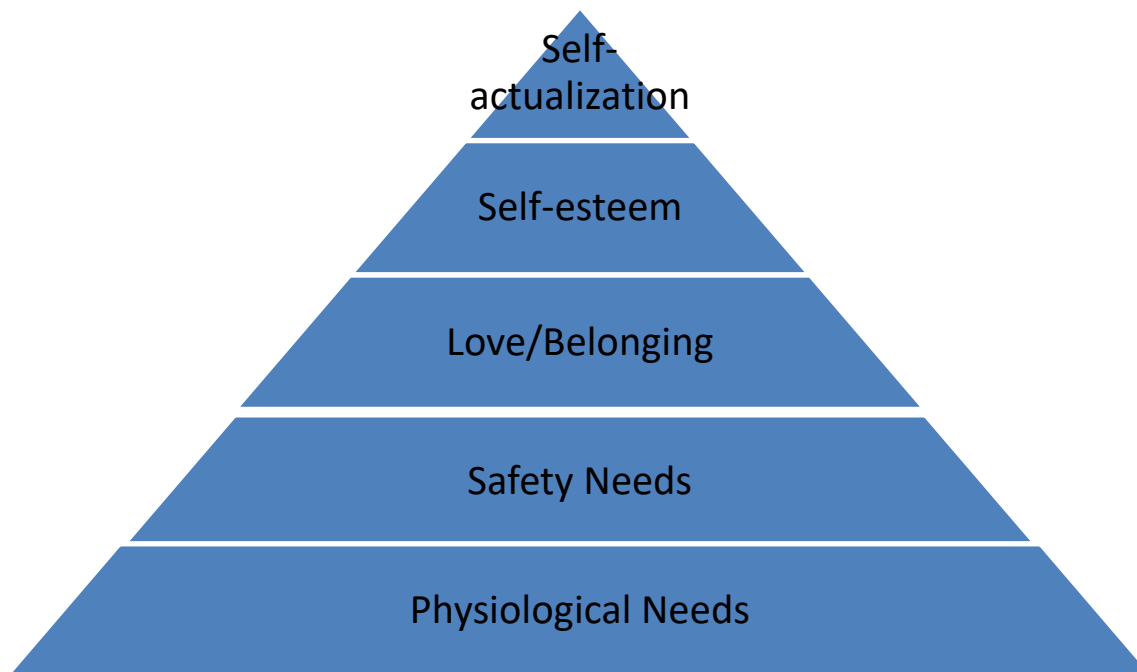


Figure 1



The non-fulfillment of some basic needs impedes the social inclusion of peoples' with disabilities. The need for adaptive clothing arises to fulfill one of the basic needs that seems intertwine with other aspects of concern in the hierarchy of needs because adaptive clothing while situated to aid their mobility and health concerns, it has been factored as well to inspire their active social engagements. Social inclusion is further classified on the basis of Jenson's framework and five dimensions of social ratings (cited in Jeannette, 2008):

Belonging-Isolation

Inclusion- Exclusion

Participation- Non-involvement

Recognition-Rejection

Legitimacy-Illegitimacy

A nations' level of development and cohesiveness is therefore assessed on the level of social inclusion based on this five index. This indices of assessment corresponds to the notion disability is a developmental issue which directly as it demobilizes a vital segment of a nation's population and strength.

Review of Relevant Literature / Themes

Adaptive Clothing This refers to functional clothing specifically designed to meet the needs of persons with disabilities. They are clothes meant to not only facilitate their mobility, but to also aid their healing process in most cases or to generally improve their health conditions. In the same vein, Ulor (2019) noted that "Adaptive clothing like the name suggests is a type of clothing designed for special purposes especially for persons with disabilities, babies, the elderly and infirm, and that the idea is to make it easy and quicker to wear, with minimum assistance." With adaptive clothes, care givers have less challenge assisting persons with disabilities. The elderly can slip easily into their wears without stress and those who want their independence can help themselves at will.

Adaptive clothing include magnetic fastening, Velcro, shirts without buttons, elastic waist, wheelchair wears, stretchy cloth and more. These special clothing and footwear are also designed



for men, women and children. This makes pants, dresses, jackets, skirts and shoes adequately available for the comfort and convenience of PWDs.

Disability The United Nations' Convention on the Rights of Persons with Disabilities (CRPD) of 2007 describes disability as an “evolving concept” and says that “persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others”

Disability is an outcome of an interaction between health conditions (such as cerebral palsy, depression or lung disease), and environmental factors (such as inaccessible transportation, limited social support or air pollution). WHO's International Classification of Functioning, Disability and Health provides the scientific basis for this model of disability. Disability is a matter of degree, because mental and physical impairments range in severity, from minor to severe. The experience of disability over the life-course is a universal human experience since everyone will experience some limitation in bodily or mental function at some point.

Millennium Development Goals The Millennium Development Goals (MDGs) was developed as a policy framework by the international community in 2000 which got the nod of about 189 countries. It constituted of unified set of development objective addressing the needs of the world's poorest and most marginalized people, which were supposed to be achieved by the 2015 terminal date. The goals were:

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria, and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development.



Though the millennium development goals were explicit in the development trajectory of the world's poor they however did not crystallize an actionable point for special need people until the 2010 SDG report mentioned disability for the first time taking cognizance of challenges confronting children with disabilities while drawing a nexus between disability and marginalization in education. It was however at the General Assembly of the United Nations in September, 2020 that a resolution was adopted recognizing that “policies and action must also focus on persons with disabilities so that they benefit from progress towards achieving the MDG” (WHO, 2011). Not until the launch of the Sustainable Development Goals a concrete action point embedded as a policy framework towards achieving inclusive development around the world was not crystallized.

Sustainable Development Goals in Perspective The 2030 Agenda for Sustainable Development and its 17 SDGs provided a powerful framework to guide local communities, countries and the international community toward the achievement of disability-inclusive development. It pledges to leave no one behind, including people with disabilities and other disadvantaged groups, and has recognized disability as a cross-cutting issue to be considered in the implementation of all of its goals. This is contained in Goal 3 of the SDG which is to achieve universal health coverage for the global population. What this goal holds for persons with disabilities means that universal health coverage are inclusive of financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all and with special regards to persons with disability.

This is more so since there is substantial evidence that people with disabilities have poorer access to and uptake of health-care services, which results in greater unmet health needs.

Universal health coverage is particularly important for people with disability since cost is a primary reason for health care being inaccessible. Even in high-income countries, people with disabilities experience financial barriers to health care. The greatest financial barriers are out-of-pocket expenses, which are increasing and particularly impact people with chronic diseases and disability .For instance from a research conducted in 2016 of countries in Europe, 30% of those



with disabilities who needed but could not get health care cited cost as the reason for lack of access. There are also wide variations between countries: in Denmark, affordability was cited as an obstacle by only 16% of people with disability, while in Italy the figure was 94%(WHO, 2017).

Evidence also suggests that people with disabilities are denied access to rehabilitation services based on age: a survey of 70 neuro trauma centres across Europe showed that in 32 centres people aged 65 years and older with brain injury were less likely to be referred to a rehabilitation clinic because of perceived inferior rehabilitation potential in the elderly.

According the World Health Organization in a 2017 United Kingdom study, people with a severe disability were found to be 4.5 times more likely to face a problem accessing mental health care, primarily because of cost, while those with a mild disability had a 3.6 higher chance of facing difficulties. Austerity programmes in countries such as Greece tend to have a disproportionate impact on access to health care for people with disabilities (WHO, 2017).

Sustainable Development Goals (SDGs) and the Convention on the Rights of Persons with Disabilities The UN Convention on the Rights of Persons with Disabilities (CRPD) has given the disability movement a strong legal framework to advocate for the rights of persons with disabilities. The 33 core articles of the CRPD, which cover all areas of life, must be implemented and monitored. The EU and all its Member States have a legal obligation to comply. The 2030 Agenda for Sustainable Development provides a political momentum to push for the realization of the CRPD. In fact, there is a considerable overlap between the articles of the CRPD and the SDGs as the 2030 Agenda was built upon existing international and national commitments such as the CRPD.

The CRPD is legally binding while the 2030 Agenda and the SDGs are a political vision for a better world to be achieved by 2030. The 2030 Agenda and the SDGs are both clearly inclusive of persons with disabilities and can be used as an advocacy platform to draw the attention of decision makers for the creation of disability-inclusive policies and programmes.



The 2030 Agenda commits, in the same spirit as the CRPD, to empower those at risk of vulnerability, including persons with disabilities. It also promotes universal respect for human rights, equality and non-discrimination.

It is noteworthy that progress on official development assistance (ODA) for basic health from all donor shave continued to increase in real terms since 2010, however major progress seems to have been made in improving the health of millions of people, increasing life expectancy, reducing maternal and child mortality and fighting against leading communicable diseases while progress is slow with regards to people with disabilities particularly in the areas of their clothing needs. Concerted efforts are obviously required to achieve universal health coverage and sustainable financing for health, and to address the growing burden of special need people.

The imperatives of Adaptive Clothing Some of the functional requirements affecting garment design are the wearer's limited mobility and the need for a comfortable garment that does not cause additional health problems, such as skin irritation, blood flow obstruction, etc. The need for clothing of disabled people to provide ergonomic comfort in their sitting positions and improve the overall quality of life has become an imperative health necessity. It is designed for people from a physical and cognitive point of view, cultural, social aspects, and other aspects related to body dynamics.

For instance wheelchair users have special clothing which gives them some comfort while on the move with flexible patterns if they need to use the restroom. Usually, wheelchair wears have open back that allows users to get dressed without getting off. Most of these trousers give some extra cushion and comfort while seating in the wheelchair. There are wheelchair jeans with such features for men and women as well.

The problems faced by wheelchair users while dressing have been researched by Pruthi et al(2006) and the following have been identified: pain in the upper limbs while dressing and un- dressing; the removal of clothing from dormant legs; incontinence; bedsores caused by a lack of movement; and injuries caused by traction belts, etc.



In order for the functionality of clothing for disabled people to be achieved, the following requirements is suggested: moisture absorbency; the use of elastic fibres for comfort; the use of easy closure systems (zippers, hook and loop fasteners, buttons, etc.); easy to maintain clothing with a low level of electrostatic charging; and a minimum level of body odour retention (natural fibres with antibacterial finishing).

Clothing designed for disabled people must also meet the following needs: sleeves should be adapted to the back and shoulders, facilitating more freedom of movement while pushing a wheelchair, comfort should be ensured, without fabric creases caused by sitting for long periods, trousers should not be too tight (blood flow obstruction due to strong pressure) or too loose (skin irritation on the back and hips due to fabric creases), and should be high-wasted on the back compared with standard clothing and should not tighten around the knees and create needless creases, and the pockets should not be sewed on the back of trousers and should be longer than standard cuts. Sleeves in the elbow area should also be shaped according to the principles of comfort, where it is possible to find constructional solutions. According to Ulor (2019) for individuals with upper body disabilities, open back tops are easy to wear while seated. Such dresses also come in male and feminine versions. As more people are aware of the need to provide dressing solution for the differently abled this challenges can be eased. He further added that emphasis should be on:

- The knee – the design should give room to enable the knee area be free and comfortable knowing that the individual will seat for a long time.
- Pocket – adding side pockets with zippers is a sensible thing to do as it will help the individual keep items handy and a zip safeguards contents unlike traditional pockets that are open or buttoned.
- Extra fabric – some areas of the body like crotch, waist and thigh should have more cloth for extra room and comfort.

Materials and Methods



The study was located in purposely selected clinics in Delta State Nigeria, where persons with disability are been attended. Mixed method research design was adopted which cut across quantitative and qualitative approaches.. Three groups of respondents selected on the bases of convenience of availability participated in the study. These were persons with disability, their caregivers and medical practitioners. Medical doctors were suited to respond as persons with professional knowledge of the treatments related to persons with disability as well as haven been providing support to special need people.

In addition to thorough review of secondary data from internet and other sources, three key instruments were combined for the study. First, the structured questionnaire was administered on persons with disabilities, care givers and medical practitioners in order to situate in proper perspective, the desirability or otherwise of adaptive clothing and to as well determine the extent of economic vulnerability of this segment of the population. The questionnaire items ranged from their disability status, role as a professional or caregiver, source of sustenance and support as well as desirability of intervention in meeting the need for adaptive clothing.

Secondly, the interview guide was administered on three purposely selected medical doctors and three persons with disability. This is with a view to determine which areas of dress or clothing require adaptations for physically handicapped persons (such as those with rheumatoid arthritis which is a form of mobility disorder). Thirdly, using the observation checklist, the three participants with physical handicaps who were interviewed were also carefully observed for a reasonable period of time (minimum of one month) to ascertain the suitability of their clothing to their conditions.

Table 1: Disability Types Encountered by the Three Respondents Interviewed and Observed

Participant	Age	A s p e c t o f p h y s i c a l d i s a b i l i t y
0 1	4 0	Limited shoulder,affects both wrists, finger and knee movement
0 2	3 5	finger, joints, elbow, knee, and have frozen shoulder
0 3	6 2	All small and large points of the body(on wheelchair)



The observations focused on behavior of the participants, basically on how they walked, sat, ate and how well they were able to grasp things. This allowed proper analysis and observation on their physical limitations. Emphasis was placed on types of clothes that were worn by the patients, and their reactions were noted. In interviewing them some questions about their daily lives, and the problems they faced were asked.

Analysis of research data took the forms of application of inferential statistics tools like contingency tables, and percentages. Content analysis techniques were applied to transcribed interview recordings, among others.

Research Results/Findings

At onset of the interview, negative responses were elicited about need for specially designed clothing. This was attributed to patients attempt to hide their feelings, resulting to a situation that suggests most of them did not initially agree they had a clothing problem. However as trust grew, they were open to talk about their physical limitation especially as it affects their clothing needs. The researchers also encountered the problem of non response to some of the items in the questionnaire.

One of the interviewee acceded to the fact that

Clothes are the major challenge; I rely on charity or donations for those whom i provide care. At times, persons with disability have no clothes to wear to court, hospital and other places they needed to go. Clothing affects the mobility and health of the individual and lack of appropriate clothing has adversely affected persons with disability including constituting a barrier to their employment. This is because they wear what is available and not necessarily what is required. To this end am desirous that agency intervention is available (Interviewee 1, Medical doctor, Female, Nigerian, Age ranging 31-40)

For Interviewee 2, a 51 years old male medical doctor who provides care to those suffering from ailments that affect their mobility, a major source of provision of clothing to persons with disability is via charity. He called for agency intervention if available. Same perspective is shared by Interviewee 3, also a medical doctor, who averred “that appropriate clothing promote good health and unfitted clothing promote ill health”



All the medical doctors are mostly agreed that persons with disability are reliant mostly on charity for clothing and other forms of sustenance, and they crave for intervention where necessary. This seems to be a pointer to the economic reality and level of vulnerability of those to who care is being provided.

The relevance of adaptive clothing to persons with disability for social inclusion and overall attainment of United Nations Sustainable Development Goals is underscored by the fact majority of respondents in this study called for agency intervention in matters of clothing for persons with disability .In particular, 55.5% of the critical mass of respondents (more relevant respondents) which is the segment of the population represented by medical doctors called for agency intervention in clothing needs of persons with disability.

Conclusion and Recommendation

Adaptive clothing meets needs of persons with disability who constitute a segment of population. Interestingly, most persons with disability rely on agency intervention and charity for their housing, nutrition, education and health care. It means therefore that nonintervention in the critical area of clothing need will adversely affect the humanity of these people and further put them in despair. It will socially exclude them from the trajectory of development.

A call for intervention therefore presents an urgent need for sustainable global partnership to support the implementation of programs and initiatives that will enhance the standard of living of people with disabilities. Partnership with government agencies and ministries, civil society agencies such as the Ford Foundations, Department for International Development (DFID), United States Agency for International Development (DFID)and other organizations involved with the improvement of the global human community.

We have established in the process of this research that there is a need to commence preliminary intervention in the lives and health of people with disability through adaptive clothing. Garment and wears should be made and freely given to participants. This will enable further qualitative



assessment of the impact that such clothing on their level of comfort, health and overall social existence which this paper have strongly adjudged as positive.

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