



ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2017; 3(6): 1032-1037
www.allresearchjournal.com
Received: 14-04-2017
Accepted: 15-05-2017

Pankaj Singh Kushwaha
Centre for European Studies,
School of International
Studies, JNU, New Delhi,
Republic of India

Disability, technology and independent living

Pankaj Singh Kushwaha

Abstract

Disability is an integral part of human diversity. Basically, it denotes the physical differences and points out the exclusion from the mainstream strata of the society. Disability discourse has been taking place since the World War II. Those debates were around the health of the individuals, normalcy of human bodies and similar ability to perform the activities. Consequently, the disabled people/persons with disabilities were characterised as people with health deficit or imperfect bodied individuals.

This clinical perception was challenged by the Disability Rights Movement in Europe. Mainly, they have refuted the physical deficit perspective of the disability. This fresh emerging discourse over disability does define disability as a social construction and social marginalisation.

After these two opposing understandings, the debate over the idea of qualitative life starts. The followers of Medical Model, who purely stick with health would believe that the heavy medical intervention can provide qualitative life to those individuals who are suffering from physical pain and functional restriction. Furthermore, they argued that 'normalisation' is the only way to get rid of physical pain to overcome individuals' inabilities.

While, the Social Model of Disability which were purely concerned with the social process of marginalisation argued that, the idea of 'qualitative life' does not exist. It is purely constructed and spread as a normal feature of human beings.

After this stark controversy, technology played a fundamental role in the life of disabled. It enabled them to use facilities like mobile phones, computers, Internet, Social Media, E-mail etc in their daily routine. Technology, not only has credited a sense of independence in the life of disabled individuals, but also has encouraged them to include themselves in ordinary society which includes education, employment and so forth.

In this brief paper, I would try to address the debate over conceptualisation of disability, mainly the Medical Model of Disability and Social Model of Disability. In the second section, I would present a succinct discussion over the idea of qualitative life with regard to the persons with disabilities. In the third section, I will give attention to the technological contribution to the disabled community and attempt to conclude this debate by discussing neutral contribution of technology.

It will also focus on how the technology enhances the independent living of disabled individuals. While addressing the issues above, I will concentrate on the practical difficulties, restrictions and limitations concerning disabled individuals rather than following the ideologically bounded rationality.

Keywords: Disability/Impairment, Medical Model, Social Model, Assistive Devices, Quality of Life, Technological Innovation, Independent Living, Marginalization, Physical Restriction

Introduction

Disability is a reality in the form of human diversity in the world. It plays its role at various levels such as defining the society and intended to construct a harmonious environment where disability is not viewed in pure physical or social form. In this direction, there are two models to be put forth. First, Medical Model of Disability and second, Social Model of Disability, which play dominant roles in conceptualising disability.

After the prolonged debate over the definition of disability, the idea of qualitative life starts, where these afore mention models present their views within their ideological framework. For example, the Medical Model argues that the qualitative life can be achieved in human beings, while the Social Model vehemently opposes that and points out there is no such concept of quality of life. In the mean time, technology hits the ground in the lives of people, with a strong perception that through technological invention the status of life can be strengthened.

This brief paper is divided into three sections, the first section would deal with the conceptualisation of disability with the help of medical model and social model of Disability.

Correspondence
Pankaj Singh Kushwaha
Centre for European Studies,
School of International
Studies, JNU, New Delhi,
Republic of India

The second portion will throw some light on the idea of qualitative life with regard to the people with disability. The final part of this study embarks upon a debate over the technological contribution to the disabled persons for an independent life.

Conceptualisation of Disability

Disability is a multi-faceted concept. It contains various aspects like physical disability, social marginalization and geographical inaccessibility. There are many theoretical perspectives about disability, such as feminist perspective on disability which sticks to women's concern with disabilities, Foucauldian perspective on Disability which mainly concerns with the process of disability construction. Also the Relational Model of Disability frequently used in Scandinavian countries points out disability as a mismatch between individuals with disability and their external environment. Along with these perspectives, there are 2 mega narratives of disability - Medical Model and Social Model. They will be primarily discussed in this paper.

Medical Model of Disability

The Medical model of disability is a direct consequence of enlightenment in the 18th century. Sachs (2008) characterize it as 'modern outlook' (Goodley, 2011: 6). As an impact of the enlightenment emphasised on the scientific and logical development, the concept of disability was defined in physiological terms marking a break with the religious view. The establishment of industries was another major development in the era of enlightenment which defines disability in terms of productivity that is recognising people as abled or disabled.

The Medical Model of disability gives a scientific and ontological explanation of disability. It explores disability in the physiological sense and it discovers the physical differences between abled and disabled. The model has located disability in the body of individuals (Karna, 2001, Ghai, 2003: 34)^[10]. The Medical Model was developed by health professionals such as Nagi and health care agencies like World Health Organisation (WHO) and Centre for Disease Control (CDC). The main objective of medical model is to normalise the individuals' bodies and provide qualitative life (Ghai, 2003: 35-36)^[10].

In the history of Medical Model, 1976 was a landmark year. That year, WHO appointed a commission headed by Philip Wood (Barnes, 2009: 2)^[1] which introduced International Classification of Impairment Disability and Handicap (Oliver, 1990, 94, Ghai, 2015, 85)^[15, 11]. This classification widely accepted at the international and national level. Through this way, became the determining criteria of disability status in the domestic legislation of States. According to this classification, handicap constitutes of two absolute conditions. One - Impairment - which denotes any loss or abnormality of physiological, psychological or anatomical structure; functional limitation of the body of individuals (Ghai, 2015)^[11], and two - Disability- which denotes the inability of the people to perform activities that are considered normal for others. These two conditions of 'handicaps' recognised the disadvantageous position in a given situation for others in the society. Even the WHO's perspective characterised them as 'Abnormal' persons in the normal framework of human beings (Wood, 1980)^[29]. Scholars like Michael Oliver (1990)^[15], Anita Ghai (2015)^[11] have criticized this physiological description of disability, by calling it an individualistic and medically

biased view of disability which completely overlook the social aspect of it.

Michael Oliver, in 1990^[15], defines this model as an Individual Model of Disability (Oliver, 1990)^[15]. Furthermore, he writes that the conceptualisation of disability and understanding about it, is perceived by the medical sociologists traditionally as an individual concern that is directly caused by the impairment of the body or it is the inability of the individuals' body to perform certain normal activities (Cobley, 2011)^[5].

The Medical Model is also known as 'Charity Model of Disability' (Ghai, 2003)^[10], as it follows philanthropic view and creates charity network through institutions. According to this understanding, the people with impairment(s) are less-fortunate people. They required protection from religious power and help from others in their daily chores (Cobley, 2011)^[5]. Jenifer argues that this view created a sense of dependency among people with disabilities in their lives. It created a sense of dependency among the disabled people, and also legitimised the religious view of disability as a symbol of God's displeasure. This perspective led to states' institutional care, by opening special schools to educate them, special training centres to train them according to the need of the industrial society (Ghai, 2003: 37)^[10].

The second understanding of this model was that the people with impairment(s) are ontologically and bodily disabled. They are born with a disability which is reflected in their defective limb, imperfect body or other physical differences. Subsequently this model is characterized by personal tragedy model of disability (Oliver, 1990 Swain and French 2000: 570-573, Cobley 2011)^[15, 26, 5].

William's response to critics made by Michael Oliver, Mike Oliver, Finkelstein and other followers of social model is "if one accepts that there is an independently 'real' biological body, constituting a pre-discursive causative force, then one can challenge all of the following: postmodernist social reductionism, biological reductionism and the 'one-sided social determinism (Thomas, 2004: 577)^[27]". In other words, he clearly points out that the sociologists like Oliver, Finkelstein, Mercer and other scholars have denied the existence of the independent body. Michael Oliver (1996)^[16] problematized this personal tragedy perspective which used to differentiate between abled body and disabled body by categorising the body of individuals rather than focusing on the socially disabling aspect and humanity (Oliver, 1996)^[16]. Other sociologists like Colin Barnes, Vick Finkelstein did define the concept of disability (Oliver, 1990)^[15]. Williams once again writes that the notion of disability is an 'emergent property' which results from interplay of 'biological reality' of 'physiological impairment' and 'structural conditioning' (Thomas, 2004: 577)^[28]. However, the concept of the abled body and disabled body comes in social practices.

The third proposition of this clinical model is that 'disability is personal affliction' and there is no connection with the society (Oliver, 1990)^[15]. It defines them as 'people with impairment' by arguing that, impairment is an inherent feature of the body which can be repaired and normalised through medical intervention. Paul T. Jaeger and Cynthia wrote by the end of the 1970s and 1980s, society has inculcated the medical values in their practices therefore, it believes that a person having an impairment or persons with disability are referred to as 'lame', 'crippled', 'retarded',

'handicapped', 'defective', 'imperfect', 'weak', 'dependent', 'seeking charity' and 'burden on the society'. Further, Jaeger expresses that this was forceful and arbitrary inclusion in the practices by the agencies and through the institutional practices. Here the argument of Jennifer seems true that the medicalization of disability and industrial solutions have penetrated arbitrary construction about the people facing disability. Emily Martin commented once that the science has got a privileged position in society during 19th and 20th century and has contributed to the arbitrary mode of construction to society.

The Medical Model of Disability is rejected by the contemporary sociologists and disabled activists. Authors including Colin Barnes, Tom Shakespeare, and Vick Finkelstein, activists like Pfeiffer Yashida have criticized it on the ground of its clinical absolutistic diagnostic method and clear marginalisation of social aspects. Mainly, the sociologists argue that disability is all about social construction and arbitrary imposition on the people with disabilities. This increasing wave of criticism paved the way for the rise of the Social Model of Disability, which has altered the understanding of disability and dominated mainly 1950s and 1960s.

The Social Model of Disability

The Social Model of Disability is another mega narrative of disability. It was introduced by the UPIAS (Union of Physically Impaired Against Segregation) in 1976 (Michael Oliver, 1990, Mike Oliver, 2004: 7, Barnes, 2004 Shakespeare and Watson, 1997) ^[15, 2, 24].

The birth of Social Model was recognised as the critical side of the medical coin (Barnes, 2009) ^[1]. It denounced the medicalization of body on several grounds and offered an alternative understanding of disability. For example, the social model argued that 'disability' is not an individual's question (Oliver, 1990) ^[15] and it rejected the 'personal tragedy' of individuals (Swain and French, 2000, Barnes, 2009) ^[26, 1]. Thirdly, it overthrew the medical term 'Persons with Impairment' and successfully established 'Disabled People' as terminology for addressing disabled people around the world (Barnes, 2009) ^[1].

Social Model is a rights based approach. Jolly argued that, under the influence of this model, States implemented policy related to accessible housing, roads and other states led facility. Colin Barnes and G.F. Mercer wrote that this is the social model that talks about the intervening state, where states take the responsibility of developing the equal structure to provide the equal opportunity for people with disabilities (Barnes and Mercer, 2004) ^[2]. Even in India, the 'Persons with Disabilities, Equal Opportunity, Protection of Rights and Full Participation Act' (PWD Act) 1995 is the best example to prove how the Social Model has convinced States to play positive, responsive role to fill the gap between disabled and non-disabled and build the ground where all the people would be able to exercise their rights equally. Even in U.K., it has influenced the State's policy as reflected in the 'Disabled Person Services Consultation and Representation' Act of 1986, the Disability Discrimination Act (DDA) 1995, Disability Rights Commission Act of 1999 and Equality Act (EQA) 2010.

The Social Model makes a distinction between 'Impairment' and 'Disability' (Shakespeare, 2002, Barnes, 2009, Oliver, 2013) ^[25, 1]. They took this idea of distinction from women's movement. As Annie distinguished in 1972 between 'sex'

and 'gender', according to feminist approach, sex is a biological distinction that does not make the idea of weakness and softness. Gender, on the other hand, is a social and cultural construction that looks at women as weak, meek, soft and second class citizens in the society. In this similar vein, the disability discourse utilised this binary distinction in their respective field of research. This mode of distinction between Impairment and Disability is characterised by Crow as a 'Bio-split' in the progressive scheme of the social model of disability (Ghai, 2015: 242) ^[11]. Michael Oliver (1996:22) ^[16] writes that there is a necessary need to be aware of the distinction between impairment and disability. The disability of people with such impairment denotes that there is a person who is lacking a limb or having defective limbs, including lack of organs and training in possessing the normal mechanism of the body. However, the disability is a social and external restriction on the people with a disability that is originally over and above that impairment (quoted in Shakespeare 2002: 3-4.) ^[25]. Further, this model has contributed a lot to the British disability movement, Shakespeare argued that this understanding made oppression of disabled in the society comprehensible. With this understanding, the British disability movement announced the disabled community as an oppressed group in the British society (Shakespeare 2002:4) ^[25]. Shakespeare further goes on to argue that impairment does not qualify for disability (Swain and French, 2000: 570-571) ^[26]. Similarly Michael Oliver (1996) ^[16] argued that "disablement is nothing to do with the body, impairment is nothing less than a description of the body (Hughes 1997: 330) ^[13]". Thus, the British Social Model of Disability came to be characterised as 'strict Social Model of Disability'. This British Social Model of Disability subsequently spread in the North America.

In 1985, Vick Finkelstein wrote 'No Participation Without Representation' (Barnes and Mercer, 2004) ^[2]. This view was also supported by non-disabled authors by arguing that people without disabilities have no firsthand lived experience of people's attitudes, social traditions etc. Therefore the people with disabilities, who are the direct recipients, have a greater claim (Barnes and Mercer, 2004) ^[2]. Consequently, Michael Oliver wrote that the experiences of disabled form the actual ground of disability studies (Oliver, 1990) ^[15]. Tom Shakespeare (1997) ^[24] pointed out that the authors without disabilities in the field of disability research were not willing to include social aspects and always tried to justify the individual and personal tragedy aspects of impairments (Shakespeare and Watson, 1997) ^[24]. Further, he argues that they did not even cite the writing of disabled authors like Barnes, Finkelstein and Michael Oliver to explore the position of disabled people in the society (Barnes and Mercer, 2004) ^[2]. This pro assertive model, delegitimised the non-disabled as a representative of the disabled community.

In the 1980s and 1990s, the Social Model took inspiration from 'Black and Feminist Movement', that there is a need to represent at each and every level of the society, and treat them as sole representatives of their community. According to this understanding, it was argued and widely accepted that all organisations working for the disabled must be controlled by the disabled people. This move was characterised as a 'Emancipatory Social Model', where disabled people recognised as their real representatives (Branfield, 1998) ^[4].

The idea of qualitative life

After the prolonged discussion on the conceptualisation of disability, the question arises how far the disabled community can enjoy their life as equals, as other people with/without physical restriction. It has become a moot question for the research scholars of disability field. There is a strong perception among disability scholars that there is no such criteria of perfect life for both people with disabilities and without disabilities. While there is another set of scholars who believe that people with physical disability feel pain and restrictions in their life, and that culminates to low chances of the qualitative life. They do believe that life can be improved through ensuring the medical intervention and by improving medical science and technological innovation. In this section, I will concentrate on the idea of qualitative life, especially with regard to disabled people in the context of two aforementioned models.

It has been explored that there are two distinct models of disability and both conceptualise disability in different directions. For example, the medical perspective expresses concerns over the defective body of individuals, while the social perspective relies on the social marginalisation and stigmatisation of the disabled people. The health care professionals are more concious about corrective technological devices and strengthening the medical practices, but the followers of Social Model believe in abolition of exclusive traditions of the society. Similarly, both the models take contrary stands on the issue of 'quality of life' for the People with Disabilities.

The Medical Model believes that the People with Disabilities have to face pain and physical restrictions in order to enjoy a normal life. The physical defectiveness restricts or excludes them from the normal life and behaviour. Secondly, the health care professionals argue that the life of impaired individuals can be improved through medical interventions. Thirdly, they maintain that life is impossible in less perfect body conditions. Therefore, the people with less perfect bodies require 'assistive devices' for their minimum life functioning (Oliver, 1990) ^[15].

The question of assistive devices is a medical construction. As the scholars of the Medical Model argue that, People with Less Perfect Body are not able to work as others do. Further, the proponents of the Medical Model explain that, technological devices are not simply devices, but have become inevitable parts of the disabled life. Therefore, experts like Burry and Wood define certain technical devices as 'assistive devices'.

But the Social Model of Disability has rejected the entire discourse over the 'quality life' related to the disabled people. Initially, the practitioners of Social Model argued that the concept of quality of life with regard to the disabled people does not exist on the surface (Oliver, 1990) ^[15]. In this view, this idea is purely a social construction and they wish to dilute the body of the People with Disabilities in the social domain. Michael Oliver (1996) ^[16] has pointed out that the conceptualisation of disability is a cultural production. Further, he and Yoshida believe that each culture have their own body of knowledge which are usually arbitrary. Secondly, they argue that the life of disabled cannot improve only through the medical strengthening and technological innovation, but it requires social restructuring and re-designing of the social norms. Thus, here it can be argued that both the dominant theoretical understandings stand on contrary positions, engaging

themselves to project as ideological standpoints, rather than sketching the actual life cycle of disabled individuals.

Technological invention and the life of disabled people

In the previous section, we have analyzed the concept of quality of life of disabled in different ways. Medical Model is seriously stuck with medical advancement and technological innovation. While the social modelists such as Michael Oliver, G. F. Mercer, Vick Finkelstein are more concerned about negative trend of socialization around the people with disabled bodies, this section is devoted for a neutral discussion on the technological contribution towards the disabled people. It ignores methodological framework during addressing the concerns relating to the disabled community. With a strong perception, technological inventions are direct results of need for the people rather than mere ideological argument. The debate will concentrate around the question: 'Does the technology play its role for an inclusive society? Has the technology bridged the gap between disabled and non-disabled?'

Technology is an independent reality in the world. It works according to needs of the people and makes its independent contribution to them. Similarly, technology has played an important role in terms of creating an inclusive environment and accessible infrastructure, not only for the people with disability and also it helps people without disabilities too. Thus, it is clear that technology is not only the need of particular people or community, it is a consequence of betterment of the living beings. Now the question arises why some technical devices are characterised as 'assistive devices' in case of disabled users?

In the modern technological world, the technology has become integral part of infrastructure to access the world wide services. In similar vein, disabled people use technology to access the national and international web related services such as banking portals, ecommerce and others. Consequently, the people with disability are characterised as active users and direct recipients of technology, but it has been observed that the explanation of defining technological devices as 'assistive devices' in context of disabled user is very derogatory as opposed to a label such as 'technological device or invention' in context of non-disabled users, has emerged.

Subsequent to the discussion regarding the idea of assistive devices, there is an unsettled question - how the technology has reduced the gap between people with abled bodies and disabled bodies. We have explored that technology is a part of infrastructure rather than a consequence of a particular ideology. In this process, technology has made many fundamental contributions to the disabled community.

For example, the invention of Job Access with Speech (JAWS) & Non Visual Display Access (NVDA) (for using computers), Kurzweil (educational accessibility), MAGIC (for low-vision user), Braille Display Unit (displaying texts in Braille form in computer screens), Tectile path (for the access to roads, buildings) is exclusive for people with blindness. The idea of Tricycle, Motorised Vehicle, crutches have insured the free movement of people with locomotor disability. Similarly, hearing disabled have also gained benefits from hearing machines.

The revolution of Information Technology has enabled the users with disabilities to integrate with the existing information cycle. For example, mobile phones and laptops were a dream for blind people. But after the inventions of

'E. Speak and Talks' for mobile phones, 'Talk-Back' in Android phones, and 'Voice over' in iPhones, people with disability are ensured to be equal users and similar beneficiaries of all of the mobile technologies. Likewise, the computers technology has also become accessible for the visually impaired people after the invention of JAWS. With the help of these technical adventures, disabled people have become active users on day-to-day social networking websites such as Facebook, Whatsapp, Skype, Twitter, professional websites so on and so forth. Thus enjoying the equal status in the technical society.

Freedom of movement is the biggest concern of the disabled community. As the technology is addressing the need of others, it has addressed the needs of the disabled people too. In the process of free movement of people with locomotor disability, crutches and motorised vehicles have become a part of the technological reality. It has developed a 'sense of independent life' among the people with physical impairment also. But once again, we must understand that, technology does not only provides accessibility to disabled people, but also has transformed and revolutionised the life of non-disabled people as well. Therefore, the idea of 'assistive devices' ear-marked only for the disabled people has to be contested rather than promoted.

Concluding Remarks

In this brief discussion, it has been analysed that the concept of disability is defined by the Medical Model and Social Model differently. The medical model is purely concerned with medical intervention and physical restriction of body, while the social model fundamentally relies on the social explanation of the disabled body.

The advocates of social model like Paul Hunt, Michael Oliver, Vick Finkelstein, G. F. Mercer, Sally French, Shally Tremain, Jean Moris and others describe the establishment of an industry which has created the binary between abled bodies and the disabled bodies. In their opinion, the categories put forth during the Industrial Revolution gradually became a part of the vocabulary of the natural social structure where the people with disability are systematically excluded.

Both medical and social understanding about disability believe that 'Disability is a consequence'. But both perspectives contradict each other in pointing out the root cause of impairment/disability. For example, medical model argues that the condition of disability is not an original position, it is a consequence of physical impairment. While the social modelists argue that, it is a consequence of social stigmatisation and marginalisation which is maintained by the exclusive traditions.

At this juncture, it is clear that disability is two way construction - first through physical differences and secondly through social exclusion. These two definitional accounts raise few questions about quality of life, where both understandings argue in a like chalk and cheese approach. Medical Model inscribes that if a person has physical restriction he/she can not enjoy normal life, therefore the people need heavy medical intervention and technical assistance.

But Social Model refutes the idea of 'quality of life' vehemently and denies bluntly the existence of discourse on quality of life (Oliver, 1990)^[15]. Further, Oliver points out that it is another deliberate way of exclusion and marginalisation of disabled people. Therefore he focused on

social inclusion, abolition of exclusive tradition, correction of language etc.

The final section has describes, how technology has played a fundamental role for the people with disabilities. It has provided universal access and similar rights on same ground such as there is no difference between a blind laptop user and a non-disabled laptop user. In brief, it can be argued that the technology has made elementary contribution across the boundary line of ideology. It has empowered the disabled in the high technological modern society by creating a strong sense of independence among them.

References

1. Barnes Colin. Understanding the Social Model of Disability. Halmstad i Högskolan, 2009.
2. Barnes Colin, Mercer Geof. Breaking the Mould? An Introduction to Doing Disability Research. In C. Barnes, & G. Mercer (Eds.), *Doing Disability Research* (pp. 1-14). Leeds: The Disability Press, 2004.
3. Barnes Colin, Mercer Geof, Shakespeare Tom. *Exploring Disability: A Sociological Introduction*. Massachusetts, USA: Polity Press, 2005.
4. Branfield Fran. What Are You Doing Here? 'Non-disabled' People and the Disability Movement: A Response to Robert F. Drake. *Disability & Society*, 1998; 13(1):143-144.
5. Cobley David Stephen. *Towards Economic Empowerment for Disabled People: Exploring the Boundaries of the Social Model of Disability in Kenya and India*. Ph.D. thesis. Birmingham, UK: International Development Department School of Government and Society University of Birmingham, 2011.
6. *Disability Discrimination Act*. (T. G. UK, Compiler) London, United Kingdom, 1995.
7. *Equality Act*. (T. G. UK, Compiler) London, UK. 2010.
8. Finkelstein Vic. *Disability and the Helper/Helped Relationship. An Historical View*. *Handicap in a Social World*, 1981.
9. *Fundamental Principles of Disability*, 1976, 22, UK.
10. Ghai Anita. (DIS) Embodied form: Issues of Disabled Women. New Delhi, Delhi, India: Anand Publications, 2003.
11. Ghai Anita. *Rethinking Disability in India*. New Delhi, dehlhi, india: Routledge, 2015.
12. Hodkinson Alan. All Present and Correct? Exclusionary Inclusion Within the English Educational System. *Disability and Society*, 2012; 27(5):675-688.
13. Hughes Bill, Paterson Kevin. *The Social Model of Disability and the Disappearing Body: Towards a Sociology of Impairment*. *Disability & Society*, 1997.
14. Mercer Geof. Job Retention: A New Policy Priority for Disabled People. In a. roulstone, & c. barnes (Eds.), *Working Future: Disabled People, Policy and Social Inclusion*. Bristol, UK: Policy Press, 2005.
15. Oliver Michael. *The Politics of Disablement: A Critical Texts in Social Work and the Welfare State*. New York, USA: Palcrave Macmillan, 1990.
16. Oliver Michael. *Understanding Disability: From Theory to Practice*. New York, USA: Martin Press, 1996.
17. Oliver Michael, Sapey Bob. *Social Work With Disabled People* (2nd ed.). London, UK: Macmillan Press LTD, 1999.
18. Oliver Mike. *Defining Impairment and Disability: Issues at Stake*. In C. Barnes, & G. Mercer (Eds.),

- Exploring the Divide. The Disability Press, 1996, 29-54.
19. Oliver Mike. If I had a Hammer: The Social Model in Action. In J. Swain, S. French, C. Barnes, & c. thomas (Eds.), *Disabling Barriers and Enabling Environments*. London, UK: Sage, 2004.
 20. Oliver Mike. The Social Model in Action: If I had a Hammer. In C. Barnes, & G. Mercer (Eds.), *Implementing the Social Model of Disability*. Leeds, UK: The Disability Press, 2004, 18-31.
 21. Oliver Mike. The Social Model of Disability: Thirty Years On. *Disability & Society*, 2013; 28(7):1024-1026.
 22. Oliver Mike, Barnesx Colin. Disability Studies, Disabled People and the Struggle for Inclusion. *British Journal of Sociology of Education*. 2010; 31(5):547-560.
 23. Prideaux Simon, Roulstone Alan, Harris Jennifer, Barnes Colin. Disabled People and Self Directed Support Schemes: Reconceptualising Work and Welfare in the 21st Century. *Disability & Society*, 2009; 24(5):557-569.
 24. Shakespeare Tom, Watson Nicholas. Defending the Social Model. *Disability & Society*, 1997; 12(2):293-300.
 25. Shakespeare Tom, Watson Nicholas. The Social Model of Disability: An Outdated Ideology. *Journal Research in Social Science and Disability*. 2002; 2:9-28.
 26. Swain John, French Sally. Towards an Affirmation Model of Disability. *Disability & Society*, 2000; 15(4):569-582.
 27. Thomas Carol. Disability and Impairment. In j. swain, s. french, c. Barnes, & c. thomas (Eds.), *Disabling Barriers and Enabling Environments*. London, UK: Sage, 2004.
 28. Thomas Carol. How is Disability Understood? An Examination of Sociological Approaches. *Disability & Society*, 2004; 19(6):569-583.
 29. Wood Philip. *International Classification of Impairment, Disability and Handicaps*. Geneva: World Health Organisation and World Bank, 1980.