People with disabilities: An ancient society got it right, but can we?

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Abstract

Persons with disabilities of today often have difficulty reaching full career and social status, due to physical, functional, practical and psychological factors. The Lenggong Valley, in the state of Perak, Malaysia contains the 11,000 year old remains of a member of the Austramelenesoid family. He was tall, but had several abnormalities. He had a skeletal deformity of the upper limb. His elbow was held flexed, wrist extended and he had an abnormal left middle finger. He also had a scoliosis and a shorter left lower limb. It is estimated that he walked with a limp. However he is estimated to have died at the age of 40 to 45 years, twice the life expectancy of his time. Archeological findings indicated that he was buried as an important person in the tribe, possibly a Shaman. With his abnormalities, he was probably unable to hunt effectively, yet obviously given a more appropriate role to play and able to lead a long life of a respected person, being buried with full honours of his time. An ancient civilization was able to adapt roles so that a person with disabilities could use his unique abilities to contribute to society and lead a respected life, something present society could think about and learn from. If current society could help the disabled to achieve their full potential everyone would stand to benefit.

Keywords: Paleolithic, Perak, brachydactyly, scoliosis, respected longevity

Introduction

Persons with disability in the 21st century still face more frequent hardships with a greater impact then others (1). They are then less able to exercise rights, form their true or best “identity” (2) and reach their full potential both socially and also in their careers (3, 4). They are thus negatively discriminated against especially in rural underdeveloped societies (5).

The Lenggong Valley, in the state of Perak, Malaysia contains the remains of an extraordinary man. Named the Perak Man, he lived in the Paleol-
lithic period and was a member of the Austra-
melanesoid family found in Australia, Indonesia,
Papua New Guinea and Malaysia. His eleven
thousand year old skeleton, the oldest complete
skeleton to be found in South East Asia, tells an
interesting story.

He was buried in a fetal position. His estimated
height was approximately 154 cm. He had a long
head and narrow face. His cranium, humerus, femur
and tibia have similar traits and morphologically
linked with Australomelanesoid affinity, a race
occupying the western part of Indonesia which now
largely confined to east Indonesia, Melanesia and
Australia.

The Perak Man

Archeological excavations have been conducted by
the Centre of Archeological Research, Malaysia,
followed by multidisciplinary and scientific study
of the skeletal remains. Cave drawings by local
indigenous have brought the Lenggong Valley to be
one of the icons of pre-historical times in its region.
The Perak Man was discovered with only few missing
bones such as metatarsal, and parts of the face,
making him one of the earliest most-complete pre-
historic human skeletons in Southeast Asia in its
ancient times ranging from 10,000 – 11,000 years
ago (6).

The deformities

Physical examination of the skeleton was first
conducted on-site and later followed by analyses in
the geochronology laboratory. The statistical compar-
ison of the biological distances, based on the dental
and limb metric traits, suggested that the Perak
Man was morphologically linked to the Australo-
Melanesian. Detailed analyses of the remains showed
that he was born with several abnormalities:

- The arm: He had a skeletal deformity of the
  left upper limb, which was markedly shorter
  than the right. His left elbow was held flexed
  and wrist extended. The shortening indicates
  that he could have had a congenital abnorm-
  ality. The shafts of his left ulna and radius
  were shorter, abnormally thin and anteriorly
curved (see figure 1). With a form and
posture like that he could have suffered from
a congenital neurological abnormality such as
cerebral palsy or brachial plexus birth palsy
or even polio.

- The hand (see Figure 2-3 (7): He is the first
  prehistoric skeleton found to have an abnor-
  mal left middle finger with a brachymeso-
  phalangia type 2A. The left proximal and
  middle phalanges of his middle finger were
  volarly and radially curved. Taking into
  consideration his hand and upper limb
  deformities, it is unlikely that he had full
  function of the upper limb.

- The spine: His vertebral column was laterally
curved indicating that he also had idiopathic
scoliosis. His lower lumbar vertebrae had
significant narrowed invertebrate disc space
and osteophytes. This would have caused him
to walk with a limp (see Figure 1).
The Perak Man is estimated to have died at the age of 40-45 years, which is twice the life expectancy of his time. The current knowledge of prehistoric lifespan suggests that the average lifespan of his community was 20-30 years. The way the Perak Man's body was buried indicated that he was an important person in the tribe. He was buried with both legs folded up to the chest while both hands were holding some pieces of meat. There were 2,878 riverine food shells, several types of animal flesh and 10 stone tools weighing 1.261 kg placed around him, scattered all over the burial site. This was probably an effort to ensure an abundant afterlife. This indicated that great effort was taken by his community to bury him with honour (8).

Persons with disabilities living with significant limitations in functioning often experience exclusion from full participation in their communities (4). Factors such as inaccessible physical environment, lack of relevant assistive technology and rehabilitative devices and the negative attitudes of people limit functions and create disability (9). The Perak Man with multiple disabilities, was probably unable to hunt effectively, yet he was given a more suitable role to play and was able to lead the long life of a respected person, being buried with the full honours of his time.

The community may have insulated him from death resulting from accidents or injuries, whereas others went out on the more risky job of hunting to survive. Due to the care and respect given to him by the community, he survived to a comparatively old age. He would have gained knowledge and experience in survival, planning, hunting methods, healing and related aspects of prehistoric life. He possibly took the role of a Shaman. He may have been a person who did not incorporate disability into his identity, thus the special role he had in his community. Murugami (2) described situations where persons with disability have ascribed themselves as able-bodied, deeming the “biological” self as unimportant as long as they are capable of engaging in life roles as much as the persons without disabilities, in some instances doing more than their counterparts (2).
From the community perspective, protecting a member of the society, who has disabilities, and giving him a more suitable role to play, including him in community life, allowed him to become a more valuable member to society, the longer he survived (10).

The Perak Man may have experienced and benefited from a form of community-based rehabilitation (CBR). The modern world CBR was initiated by the World Health Organization (WHO) in 1978 in order to promote access to rehabilitation services in low income and middle income countries (11). It is also seen as a strategy that helps address the ugly forms of discrimination that exist in the community. The strategy focuses on enhancing the quality of life of PWDs and their families, to meet their basic needs and ensuring inclusion and participation and their own development and community development (5).

When we consider current society, persons of different ability may also have heightened abilities compared to others in the remaining functions available to them. It is known that the blind hear more acutely even temporary blocking of one sense heightens other senses (12). It has been reported that some persons with disabilities have similar school potentials, mental functioning and educational aspirations as their non-disabled peers (2). It is possible in this age that these often more acute abilities may be made use of by society as a whole, especially where technology may enhance such opportunities.

Conclusion

The discovery of Perak Man and his mortuary goods has yielded extraordinary evidence of his physical condition as well as of prehistoric ways of life. The Perak Man is an example of how an ancient civilization was able to adapt roles so that a person with disabilities could use qualities available to be included in and contribute to society and to lead a long and respected life. Something that present society with all its sophistication could research, and derive benefit from, for the truly “differently” abled and society as a whole.

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Ethical compliance

The authors have stated all possible conflicts of interest within this work. The authors have stated all sources of funding for this work. If this work involved human participants, informed consent was received from each individual. If this work involved human participants, it was conducted in accordance with the 1964 Declaration of Helsinki. If this work involved experiments with humans or animals, it was conducted in accordance with the related institutions’ research ethics guidelines.

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