

FLORE Repository istituzionale dell'Università degli Studi di Firenze

Can anthropology improve our care of inherited cardiac arrhythmias?

A modest proposal
Questa è la Versione finale referata (Post print/Accepted manuscript) della seguente pubblicazione:

Original Citation:

Can anthropology improve our care of inherited cardiac arrhythmias? A modest proposal / Barlocco F.; Olivotto I.. - In: HEART RHYTHM. - ISSN 1547-5271. - STAMPA. - 13:(2016), pp. 2395-2398. [10.1016/j.hrthm.2016.08.042]

Availability:

This version is available at: 2158/1181121 since: 2020-01-03T23:49:59Z

Published version:

DOI: 10.1016/j.hrthm.2016.08.042

Terms of use:

Open Access

La pubblicazione è resa disponibile sotto le norme e i termini della licenza di deposito, secondo quanto stabilito dalla Policy per l'accesso aperto dell'Università degli Studi di Firenze (https://www.sba.unifi.it/upload/policy-oa-2016-1.pdf)

Publisher copyright claim:

(Article begins on next page)

71

72

79

86

104

105

106

107

108

49

54

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

45

46

47

48

Can anthropology improve our care of inherited cardiac arrhythmias? A modest proposal

o7os Fausto Barlocco, PhD, Iacopo Olivotto, MD

From the *Department of Experimental and Clinical Medicine, University of Florence and Referral Center for Cardiomyopathies, Careggi University Hospital, Florence, Italy, and †Referral Center for Cardiomyopathies, Careggi University Hospital, University of Florence, Florence, Italy.

Calls for greater attention to sociocultural aspects increasingly demand that a more individualized, context-conscious approach become part of "personalized medicine." Today, cultural factors are considered crucial to issues ranging from acceptance of diagnosis to choice of treatment, and compliance with pharmacologic therapy, and cultural competency has become a fashionable term for clinicians and policy makers. However, as argued by Kleinman and Benson, no one has yet been able to define the term precisely enough to operationalize it in clinical training and best practice standards. The present analysis makes a case for increased involvement of sociocultural anthropology in a personalized and culturally aware practice of clinical medicine, focusing on inherited cardiac arrhythmias as a particularly suitable paradigm.

The domain of sociocultural anthropology

Anthropologists have often been concerned with health and healing, and the subdiscipline of medical anthropology deals with both the understanding of illness in different cultures and the way biomedical knowledge and medical practices are experienced worldwide. The sociocultural approach attempts to reach beyond the biologic layers defining health and illness in order to understand the context within which a meaning is attributed to both concepts. Thus, anthropology, looking at the relationship between beliefs and practices, cuts across different levels of analysis, providing a unifying view of the clinical, psychological, and social levels experienced by individuals in relationship with significant others 44 F1 (Figure 1).

With few exceptions, there has been surprisingly little communication and exchange between clinical medicine and medical anthropology, and a sort of reciprocal suspicion has

KEYWORDS Sudden cardiac death; Sociocultural anthropology; Cultural competency; Ventricular arrhythmia; Prevention of sudden cardiac death guidelines (Heart Rhythm 2016;0:0-4)

Address reprint requests and correspondence: Dr. Fausto Barlocco, Department of Experimental and Clinical Medicine, University of Florence and Referral Center for Cardiomyopathies, Careggi University Hospital, Florence, Italy. E-mail address: faustobarlocco@gmail.com.

made it difficult to elaborate the productive cooperation required to improve patient care and experience. Yet, scientific knowledge often exposes the limitations of universal, one-fits-all western-centric guidelines. A fitting example of a field that would greatly benefit but has seen little attempt to apply anthropologic ideas or even cultural competency is that of familial sudden death derived from inherited cardiac arrhythmias.

An anthropological view of familial sudden cardiac death

The condition defined as sudden unexplained nocturnal death syndrome (SUNDS) is experienced, understood, and represented in very different ways across cultural contexts. In Asia, where it is endemic, it is traditionally known as bangungot (from the words bangun "rising" and ungul "moaning," a word also used to mean "nightmare") in the Philippines, lai-tai ("died during sleep") in Thailand and Laos,² and *pokkuri* ("sudden unexpected death at night") in Japan.^{3,4} The folk explanation for *bangungot* in the Philippines is that the victim often goes to bed after a full meal, experiences nightmares, and loses control of his/her body, then, if unable to regain control by wiggling a toe or finger or being woken up by someone, may eventually die during sleep.⁵ The Ilocano, one of the country's ethnic groups, attribute it to the attack of the batibat, a fat female demon who takes revenge for the cutting of trees by sitting on sleeping men's faces and suffocating them.⁶

SUNDS in Thailand and Japan appears to genetically and clinically overlap Brugada syndrome, a relationship that seems likely but has not been fully established in the Philippines. However, the Filipino anthropologist Michael Tan⁸ argues that the overlap with Brugada syndrome does not provide all the answers about bangungot and similar folk illnesses. He maintains that not only should biomedical research "look for its possible overlap with other cardiac problems, sleep apnoea and nutritional disorders," but it also should consider it as an idiom "through which individuals and societies can talk about particular feelings and opinions," specifically "distress and anxiety coming from being away

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221 222

165

CULTURAL
CONTEXT

SOCIAL
ASPECTS
MEDICOBIOLOGICAL
ASPECTS

PSYCHOLOGICAL
ASPECTS

DISEASE

Figure 1 Aspects involved in the illness. At the core is the individual experience of the disease, entangled with the increasingly general psychological, social and medico-biological aspects. All of these are situated within the cultural context, which constitutes the object of anthropological study.

from home." Indeed, *bangungot* appears to be more common among expatriate Filipino and Thai workers and Hmong refugees from Laos. However, in contrast to Tan, it could be argued that workers abroad tend to belong to the category mostly affected by Brugada syndrome—males between 20 and 40 years old.

Guidelines: A constructive critique

The European Society of Cardiology⁹ recently issued guidelines on Ventricular Arrhythmias and the Prevention of Sudden Cardiac Death, widely considered a gold standard for management. Although they consistently follow a consensus document compiled by heart societies from North America, Europe, and Asia-Pacific, 10,11 the guidelines make no mention of cultural aspects or of any advantage that a context-based approach may bring to cultural competency. For example, Section 3.2 on "Autopsy and Molecular Autopsy in Sudden Death Victims" states that "an autopsy is recommended to investigate the causes of sudden death and to define whether SCD is secondary to arrhythmic or non-arrhythmic mechanisms." Although the medical rationale is undisputable, an anthropologist could object that some religions or cultures might oppose the performance of an autopsy, for example because of the requirement for postmortem body integrity in Japan or the delay it might cause to the funeral in Malay and other Muslim cultures. Given the stigma attached to sudden death, which is seen as the effect of sin or some blemish characterizing the family (eg, in Chinese culture, ¹² but also commonly seen in Mediterranean areas), relatives may resolutely oppose any further investigation on the deceased or on the pedigree.

Similar concerns apply to the recommendation that "targeted post-mortem genetic analysis of potentially disease-causing genes should be considered in all sudden death

victims in whom a specific inheritable channellopathy or cardiomyopathy is suspected" (p. 8).8 The scenario implies additional ethical issues regarding the relatives' right not to know, an individual choice that is heavily influenced by cultural aspects. In this regard, the pragmatic approach of the guidelines endorses a western mentality, seeing familial sudden death as a strictly medical problem whereby knowing and publicly sharing knowledge is the first step toward a solution. Although the guidelines mention that "the 'right not to know' and the possibility to decline molecular screening should be included in any pre-informative communication with the relatives," this option is clearly presented as a less preferable one. The implicit cultural assumptions are aptly shown by a sentence on the same page: "identification of the cause of an unexpected death provides the family with partial understanding and rationalization of the unexpected tragedy, which facilitates the coping process and allows an understanding of whether the risk of sudden death may extend to family members." The guidelines assume that relatives of victims of sudden death would be willing to disclose clinical history and other family information. However, that will prove difficult under conditions in which stigma or a sense of guilt is associated with sudden death but also, for example, in women with the *BRCA* mutation who are affected by breast cancer. ¹³ In certain cultures a direct and unfiltered request for sensitive information may be regarded as indelicate or downright offensive, resulting in a negative response or attitude, or it may be ineffective if the person asking the family is not aware of family relationships and roles (eg, if the patriarchal role is neglected). 12 Even the idea of ethics itself is relative, as the values informing behavior may vary between cultures and through time in the same culture. This may become particularly evident when discussing aspects such as end-of-life options or prenatal diagnosis and therapeutic abortion.

Section 3.4.2 of the guidelines show a concern for nonclinical aspects, such as the "psychosocial needs of these patients and their families," stating that "they should be evaluated and a multidisciplinary approach within specialized centres should be followed." The same applies to Section 4.6, which discusses the "psychosocial impact of implantable cardioverter defibrillator treatment" (p. 23).8 However, no mention is made of the impact of cultural aspects on the meaning individuals attach to their psychological status or to the experiences of illness and death. In Japan, for example, traditional culture clashes with the definition of brain death, resulting in resistance to organ donation from deceased individuals for transplant. 14 Perception of quality of life and acceptance of invasive approaches, such as an implantable cardioverter-defibrillator (ICD), are also dependent on culture. For example, in North American societies, which rely on self-sufficiency, physical fitness, and a proactive mindset, quality of life will be strongly impaired by limitations imposed on physical activity and an ICD will be more easily accepted, compared to a more fatalistic approach observable in many European countries (including Italy), in which a device is often seen as an impediment and athletic competition is less important.

Medical Issue (e.g. SUNDS)

MEDICAL Diagnostic Therapeutic Options

Development of Context-Specific

Development of Context-Specific

Figure 2 Proposed integration of medical anthropology in clinical practice. Flowchart illustrates a potential approach to a given medical issue (in our example, sudden unexplained nocturnal death syndrome [SUNDS]). After appropriate diagnosis and consideration of therapeutic options, the presence of relevant sociocultural issues should be individually assessed. Counseling with regard to a number of aspects (molecular autopsy, pharmacologic and device-related management, genetic testing, and family screening) should follow cultural context-specific pathways. Because this approach has neither been investigated indepth nor standardized, medical anthropology should focus on the development of specific tools for both assessment of sensitive issues and ways to conduct context-specific counseling.

Far from representing a criticism of the guidelines, these simple observations point to a major gap in knowledge requiring attention from the medical community, despite the international consensus on which they are based. This reflects the fact that medical practitioners, as argued by the anthropologist Ulf Hannerz, 15 belong to a transnational occupational class tied to transnational job markets, based on a scientific knowledge that originates in the West and is decontextualized enough to work in an international setting but largely neglects cultural competency in the process. A concerted, multidisciplinary effort addressing sociocultural contexts and integrating an anthropological point of view into clinical practice is likely to provide greater mutual understanding in a stronger patient-doctor alliance. Although the scientific evidence remains the same, the manner in which diagnostic strategies and therapeutic options are offered to patients may radically change their response and compliance. Guidelines should be enriched by specific references to these aspects before they are released in different regions of the world, but also in countries characterized by a multicultural, multiethnic milieu. Practical applications might include the development of pretest, culturally competent counseling tools (Figure 2) that capture patients' perception of specific medical issues, as well as implementation of specific, locally developed communication strategies that might "translate" sensitive concept into meaningful and acceptable terms for individuals and their families.

CounsellingTools

Conclusion

244^Q

 $268_{\,\boldsymbol{F2}}$

Taking advantage of socioanthropological approaches to illness will involve both theoretical and practical developments. The former includes insights such as the relativization of the hegemonic character of biomedicine (as proposed by

Foucault), ¹⁶ the problematization of medical belief in "rational" communication of information and compliance in following treatment regimens, ^{17,18} and an understanding of illness narratives as powerful forms of expression of the experiences of suffering. ¹⁹ In practice, going beyond the "checklist approach" of some cultural competency attempts could be achieved by following the recommendations of Kleinman and Benson¹ to determine ethnic identity and whether (and to what extent) it matters to patients by asking them rather than automatically assuming its relevance. Ultimately, sociocultural anthropology can, and increasingly will need to, provide a correction to the western-centered bias present in the medical literature and, despite the limited success of early attempts, in the training of clinical practitioners.

References

- Kleinman A, Benson P. Anthropology in the clinic: the problem of cultural competency and how to fix it. PLoS Med 2006;3:e294.
- Tatsanavivat P, Chiravatkul A, Klungboonkrong V, Chaisiri S, Jarerntanyaruk L, Munger RG, Saowakontha S. Sudden and unexplained deaths in sleep (Laitai) of young men in rural northeastern Thailand. Int J Epidemiol 1992;21:904–910.
- Gotoh K. A histopathological study on the conduction system of the so-called "pokkuri disease" (sudden unexpected cardiac death of unknown origin in Japan).
 Jpn Circ J 1976;40:753–768.
- Nakajima K, Takeichi S, Nakajima Y, Fujita MQ. Pokkuri death syndrome: sudden cardiac death cases without coronary atherosclerosis in South Asian young males. Forens Sci Int 2011;207:6–13.
- Tan ML. Revisiting Usog, Pasma, Kulam. Student edition. In: Honolulu: University of Hawaii Press; 2009.
- Umali Stuart G. Jr. Bangungot. (http://www.stuartxchange.com/Bangungot. html). Accessed December 30, 2015.
- Gaw AC, Lee B, Gervacio-Domingo G, Antaelevich C, Divinagracia R, Jocano F
 Jr. Unraveling the enigma of bangungut: is sudden unexplained nocturnal death
 syndrome (SUNDS) in the Philippines a disease allelic to the Brugada syndrome?
 Philipp J Intern Med 2001;49:165–176.
- 8. Tan ML. SUND. Philippine Daily Inquirer. June 22, 2010.
- European Society of Cardiology. Ventricular arrhythmias and the prevention of sudden cardiac death. ESC practical guidelines. http://www.escardio.org/Guide

337
338
339
340
341
342
343
344
345
346

348

lines-&-Education/Clinical-Practice-Guidelines/Ventricular-Arrhythmias-an	d
the-Prevention-of-Sudden-Cardiac-Death). Accessed December 30, 2015.	

- 10. Priori SG, Wilde AA, Horie M, et al. HRS/EHRA/APHRS expert consensus statement on the diagnosis and management of patients with inherited primary arrhythmia syndromes. Heart Rhythm 2013;10:1932-1963.
- 11. Pedersen CT, Kay GN, Kalman J, et al. EHRA/HRS/APHRS expert consensus on ventricular arrhythmias. Heart Rhythm 2014;11:e166-e196.
- Barlow-Stewart K, Yeo SS, Meiser B, Goldstein D, Tucker K, Eisenbruch M. Toward cultural competence in cancer genetic counseling and genetics education: lessons learned from Chinese-Australians. Genet Med 2006; 8:24-32.
- 13. Mazlan RA, Barlow-Stewart K, Gleeson M, Hwang TS, Yee YS, Hooi TG, Keong TM, Taib NABM. Treatment-focused genetic testing (TFGT): is it too soon for Malaysia? Ann Transl Med 2015;3(Suppl 2):AB147.

- 14. Morioka M. Bioethics and Japanese culture: brain death, patients' rights and cultural factors. Eubios J Asian Int Bioeth 1995;5:87-91.
- Hannerz U. Cosmopolitans and locals in world culture. In: Featherstone M, ed. Global Culture: Nationalism, Globalization and Modernity. London: Sage; 2010:
- Foucault M. The History of Sexuality, Volume 3: The Care of the Self. Hurley R, trans. In: New York: Pantheon Books; 1986.
- Hunt LM, Jordan B, Irwin S, Browner CH. Compliance and the patient's perspective: controlling symptoms in everyday life. Cult Med Psychiatry 1989:13:315-334.
- 18. Robinson I. Personal narratives, social careers and medical courses: analysing life strategies in autobiographies of people with multiple sclerosis. Soc Sci Med 1988;30:1173-1186.
- 19. Hydén LC. Illness and narrative. Sociol Health Illn 1997;19:48-69.

353 354 355

349

350

351

352

356 357

358

359