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THE INTERNATIONAL SOCIETY FOR DERMATOLOGY

TASK FORCE FOR SKIN CARE FOR ALL: COMMUNITY

DERMATOLOGY

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Website for the International Society of Dermatology

initiated for Durban October 2012 (Editors Terence Ryan and Gail Todd)

PUBLIC HEALTH INTERVENTIONS AND THEMES THAT

CARERS OF THE SKIN MUST BE EXPERT IN.

A HandBook for Community Dermatology: An ABCD of

26 BEST PRACTICE PRIORITY PUBLIC HEALTH INTERVENTIONS for ‘adaptation

and self management’ to be achieved in part through ALLIANCES. As described

in the Autumn Newsletter of the ISD this is currently seen as a plan with the

somewhat Utopian endpoint of much greater funding. Appeals for resources

should be a combination of an Assessment of Burden, Proof of ‘Capacity to

Benefit’, with ‘How it is Done’ using a Public Health Frame work, and a list of

Partners who will help to achieve skin care. This should at least upgrade the

potential of our profession to provide Skin Care for All: Community

Dermatology.

THE END POINT IS EDUCATION OF A WORK FORCE WITH AN EVIDENCE BASED

INTERVENTION PROGRAMME. This of course requires that time is set aside for

teaching, record keeping and writing reports and proposals.

PRIMARY CARE HAS LITTLE KNOWLEDGE OF HOW TO PROVIDE SKIN CARE, THE

WORK FORCE WILL ACT UNDER THE HEADING OF COMMUNITY
DERMATOLOGY BUT ALL MULTIDISCIPLINARY TEAM MEMBERS WILL RETAIN THEIR PROFESSIONAL ALLEGIANCES

The concept of Community engagement, involving local people with their knowledge and resources, has developed during the past half century but skin care has only recently been added in a systematic approach. The recent collected publications of the Task Force in a CD and now on this Web site illustrates achievements which now must be more widely adopted. We must build on the knowledge and customs already indicating capacity to benefit. It is less costly than inventing new approaches. Where Community Dermatology’s base is indigenous, based on existing local structures, mechanisms and initiatives, where it is representative of local interests, it is most likely to succeed.

- Community dermatology embraces common skin diseases. It is inclusive of wounds and lymphoedema and has long had neglected tropical diseases such as leprosy as a major interest. It concerns populations of individuals rather than individuals in a one to one relationship. It requires data on prevalence and human resources. It trains community based workers to manage common problems of the skin. Its interventions are low cost and address the needs of those with few resources; though not exclusively. These may be isolated, peri-urban or mobile communities, often against a threatening background such as strife or climate change.

Two papers in the 2012 series of the International Society of Dermatology describe how to make a Community Dermatology intervention in the developing world.

Estrada et al Specialised Dermatological Care for Marginalised Populations; Education at the Primary Care Level: Is Community Dermatology a feasible Proposal? International Journal of Dermatology

Marigdalia Ramirez-Fort et al “Organising a Missionary Medical Clinic” International Journal of Dermatology

The CD Capacity to Benefit has been widely read. The following publications summarize the objectives in the developing world.

Ryan TJ. International Chronic Wound Healing In Chronic Wound Care 4th ed Diana Krasner T Rodeheaver aR Gary Sibbald.HMP communications


Ryan TJ. Community Dermatology in Recent Concepts of Dermatology Ed Asok Gangly Anamaya Publications New Delhi

This is a Public Health Intervention Focusing on the disadvantaged who are poor, but actually appropriate for the wealthy especially at the extremes of life or when disabled. Thus Professor Roderick Hay, Chairman of the International Foundation of Dermatology and one of the first writers on Community Dermatology, on reading the first outline of this ABCD, noted that it was “written in the context of disadvantaged communities, whether through poverty, isolation or discrimination. However, equally, Community Dermatology is the responsibility of the wealthy and the wider remit may make this work of more interest to a larger population of skin care professionals.”

This point was realised in the development of wound healing organisations and particularly in managing paraplegics who often came from families indulging in the most expensive of recreations. When Superman became a paraplegic, immense wealth still left him vulnerable and he died from septicaemia from a pressure ulcer, with its loss of skin barrier function and entry points for bacteria. The London Paralympics 2012 was a superb example of disabilities, several of which added stresses to the skin, reaching the highest levels of achievement.

This is evidently a Public Health Intervention and by recognising the determinant role of extreme poverty and health system constraints (Brown et al 2011), the contributions of Dermatologists may become more appropriate and less short lived. Their training would more likely include topics on intercultural skills, health policy and development, health service planning and resource allocation, health systems strengthening, determinants of health, ethics in global health, and research methods.

Also worth noting is that many of the most intractable health problems that confront our world today are neither technical nor scientific, but are social, ethical, behavioural or moral, (Kenneth Stuart and EJL Soulsby2011 Reducing global health inequalities Part I J R Soc Med 104: 321-326) despite the scope to influence community health is profoundly affected by economic, environment, housing etc. reform – there remains a need to organise and deploy efficient community dermatology teams.

These authors Brown et al refer to The 2010 Marmot Review, Fair Society, Healthy lives which advocates:

*Give every child the best start in life. Enable all children, young people and adults to maximise their capabilities and have control over their lives. Create fair employment and food and work for all; ensure a healthy standard of living for all; create and develop healthy and sustainable places and communities; strengthen the role and impact of ill-health prevention. Focus on poverty, health inequalities induced by social exclusion, unhealthy living habits, societal stressors.*

Most urgently needed is the finance to develop the carers for skin care for all and to employ those who would do the job well of organising and teaching the Community Dermatology Curriculum which this ABCD will outline but for whom there is no funding for a career in Community Dermatology and no academic link for such employment. Many of these work, and will continue to find a place, in well resourced environments, but especially hoped for is to employ those who one meets from time to time that would like to work in the developing world without damaging their career opportunities in the developed world.

They should receive guidance on what to do, should be observed and assessed of their progress, given as much support as they need with finance for security of tenure and be rewarded by due recognition for achievement.

This ABCD cannot compete with publications as good as Where there is No Doctor or Helping Health Workers Learn by David Werner and Bill Bower published by the Hesperian Foundation but it will point out how skin care, as opposed to dermatology, enters into Primary Care using some of the key terminology of New Principles of Public Health outlined in Meredith Turshen The Politics of Public Health published by Zed Books Ltd 1989

**Content of the THE ABCD**

*A Book for Community Dermatology* an ABC of best practices and the issues that matter most in public health.

Ageing and end of life, Body Image, Climate Change, Diagnosis the art of dermatology, Empowerment of Women, Function Restoration, Global Burden of Disease, Housing (home and Health Centre!), Information technology, Job selection, Kindness and cultural competence, Legs to Stand on, Mobile and migrating populations, Nursing, Obesity diabetes and other forms of malnutrition, Paediatric skin care :School Health, Quality of life, Repair and Regeneration, Supplies: items used in skin care such as drugs dressings and tools, Traditional Health Practitioners and Alternative and Complementary Medicine, Urban versus rural health, Venereology, Water for washing, Xerosis: dry skin and emollients, Yin and Yang :Keeping a balance, Zealousness versus equanimity.

Healthy Skin for All: the history of a call for funding.
The history of the provision of skin care when written must include an account of UNIDERM, a document prepared with UNESCO. It was a five-year plan for the International League of Dermatological Societies prepared in the first five years of the International Foundation for Dermatology. The programme was later given the name of Healthy Skin for All.

Dermatologists had realised that the care of the skin was of greater consequence than the themes presented every five years at World Congresses. The International Committee in 1989 launched the International Foundation of Dermatology. Focusing mainly on education it perceived that the burden of skin disease was not well managed in the developing world. It chose Africa to launch a Regional Dermatology Training Centre and went to both the World Health Organisation and UNESCO to launch its programme of Healthy Skin For All.

Some twenty years earlier The International Society of Dermatology, Tropical Ecologic and Geographic was launched with a name that clearly indicated its focus. Later it was renamed International Society of Dermatology (ISD). Many who were concerned about the burden of disease wherever there was poverty called for a programme to be outlined with suggestions for bringing about healthy skin for all. It was prepared with the education and science divisions of UNESCO. It was named UNIDERM.

Much progress has been made over two decades, most of the concepts were initiated as programmes, and they were largely fulfilled...

Warning:
1) Funding has been insufficient to carry forward the full programme.
2) The human resources needed for carrying out such a programme were too small.
3) The experience of the world’s armed forces of surviving threatening climatic conditions was never resourced.

Action:
While Healthy Skin for All is unashamedly Utopian, the Task force set up in 2008 by the ISD however has proposed the less Utopian ‘Skin Care for All: Community Dermatology’. It collated more that 40 reports of achievements as evidence of capacity to benefit. See Capacity to Benefit on this website www.skincareforall.org.
The Task force has the belief that funding will be forthcoming to carry out public health initiatives once a convincing case is made of capacity to benefit, the objectives are appropriate and the collaborations effective. The professions from whence the human resources are derived must be strong advocates. They must also fully support those few who are willing to take up Community Dermatology as a career.
1) Aging and end of life

KEY POINTS:

The functions of the skin in the elderly are failing but can be restored by care of the skin.

The elderly with capacity are a valuable human resource.

The need for care of the elderly who have lost capacity should be recognised early.

The aging skin must be protected washed, oiled and adorned.

Carers of the aged should feel wanted and should receive thanks.

Highly prevalent disorders such as pressure ulcers in terminal illness and foot ulcers in the diabetic are problems of the skin

Relevance to Skin Care:

Itch is one of the commonest complaints in the elderly, (Weisshaar and Dalgaard 2009)

Ulceration is one of the commonest signs.

The prediction is that that the world will be overwhelmed by the elderly. One feature of aging is increasing vulnerability of the skin and loss of skin function. Such skin failure will have to be managed by skin care provided by self help and a substantial public health force inclusive of the fit elderly’

What is skin failure?

Barrier function is impaired and wounds/erosions/tears/ulcers are common.

Thermoregulation is inadequate to deal with extremes of temperature.

Some degree of neuropathy of the legs is to be expected.

Ageing brings with it anxieties about skin appearance, reduced self esteem, loss of dignity and impairment of body image.

Warning! On October 31st 2012 the planet’s seven billionth inhabitant was born and it was only 12 years ago the sixth Billion figure was reached. These huge figures relate to populations that are ageign. especially in the developed world. Thus in the UK 30% of the
population is over 60. In Japan there are 48,000 people over 100 and it is predicted that in that country the ratio of under 20 years to those over 65 will in a few years time be well under 1%

**Warning!** This is what old age is like in the developed world.

In The Guardian 17 October 2011 a nurse, Sarah Goldberg wrote in response to much publicity about maltreatment of the elderly in UK hospitals and a damning report from The Care Quality Commission

> *Many older patients in hospital have dementia, combined with very high levels of need, such as incontinence, and requiring assistance with eating or walking*. A significant number also have behavioural and psychological problems such as agitation and aggression. *Many do not know where they are, which increases fear.* *Meeting care needs is complicated by communication difficulties. Severe short-term memory loss means that reassurance and comfort given has no lasting effect.* *Patients may call out repeatedly and persistently, and responding can appear futile to staff.*

**Appropriate care for a combination of acute physical illness, confusion, dependency and behavioural problems requires high levels of skill, expertise and time. In my experience nurses are frustrated by a lack of specialist training and insufficient staffing to care for patients properly and most do the best they can, in very difficult circumstances.**

The problem is far more complex than a lack of “kindness and compassion”, and it is unhelpful to portray it as such. We need a clear strategy equipping staff to care for these patients. Nurses perform emotionally and physically demanding work. We need proper resources for vulnerable patients. It should be a priority, even in a budget-constrained NHS.”

**Warning!** Evelyn Waugh :The Sunday Times 7 January 1962

*Medical science has oppressed us with a huge new burden of longevity. It is in the last undesired decade, when passion is cold, appetites feeble, curiosity dulled and experience has begotten cynicism, that accidia lies in wait as the final temptation to destruction.*

**Action Point!** 1) Check how many in your community are affected by disability impairing self care such as dementia, immobility, deafness or blindness. How may they be best informed about care of the skin? There may be evidence of accumulated scars and disabilities affecting the skin. This should be recorded and readily available in times of hardship when such impairments leave those affected without help.

It is argued that the ageing population is a benefit and should be celebrated because it has so much to contribute if well looked after and protected from abuse and there is effective management of age associated non-communicable disease such as hypertension leading to stroke and ischaemic heart disease. (The lancet ‘editorial’2012.378 1274) Impairments of
the skin can be managed so that there is little affect on whole body capacity. Thus care of
the skin of the feet may prevent falls.

2) Substantial numbers of elderly are capable of caring for others. It is one way of ensuring
better health of communities. One should identify how many in each age group including
over 65s could be Skin Carers of others? “Family Carers remains the backbone of any long-
term care system” Francesca Colombo, Organisation for Economic Co-operation and
Development Telegraph. Co. Uki SEVEN 29.01 12.

The contribution of a failing skin to failing whole body function.

The management of an aging skin is the care of deteriorating function.(see Section 6 (F)
Functions of the Skin)This must be diagnosed and managed(see other sections of the ABC.)
Impaired barrier function ranges from its minimum of greater trans-epidermal water loss,
reduced hydration, and defective cornocyte health (see section (X)23 Xerosis) to ulceration
of the leg, foot or at sites of sustained pressure. (See (L) 12 Legs to stand on)

When there is failing thermoregulation of the skin the elderly die in cold or hot
environments and extreme weather.Thus 15,000 elderly died in a heat wave in France in
2003.It is the commonest cause of death from natural hazards in Australia). (see Section
(C)3 Climate Change).

The ageing skin itches, or has more persistent pain or numbness. The elderly have most
difficulty in maintaining the look good feel good factor(see Section 2(B)Body Image). Loss of
elasticity and pliability increases susceptibility to injury such as tears of the skin over the
shin from minor trauma which are difficult to heal. Incontinence erodes the skin and
aggravates pressure ulcers. The rate of healing is slowed and there are serious age related
diseases such as diabetes.

Action Point! The skin carer manages these by attention to the skin by washing and
emollients. Toe nails are cut. Shade warmth, and ventilation is ensured. Food and drink is
offered. Mosquito nets are put in place. Offloading from sites predisposed to sustained
pressure and ensuring frequent repositioning is central to good care of the skin. The elderly
must be taught to help themselves but Carers must be found to supplement Self Help.

Warning! Families are getting smaller, young members migrate, and daughters have jobs.

Action Point! Much of care of the elderly is the organisation of helpers in a rota of
attendance.

The family is central to this and their availability should be recorded, and where the family is
absent or unhelpful, community participation must be encouraged for shopping for
provisions, cooking, cleaning, helping to undress and bath or go to the lavatory. For this to
happen, help must be awarded by thanks and the situation must be made more attractive. Reducing unkemptness or odour may help to get more helpers. In the UK a smiling female, recently washed, with hair brushed and lipstick applied, however demented is more likely to get attention than the neglected recipient surrounded by filth.

In a time when care of the elderly in Nursing Homes is often unkind. The above letter from a nurse illustrates the problem.

Maintenance of mobility, should be co-ordinated with the taking of deep breaths, because the immobile rarely do so and it empties the great veins in the thorax, thereby aiding lymph flow. Accident prevention is important, whether by formal classes of Tai Chi as in China, or with Yoga as in India, or schemes of help the aged as in the UK, to improve balance or tissue viability. House surveys are necessary to detect potential dangers.

Encourage leg elevation and ankle movement. Remove from the immediate environment hazardous objects which project and cause tears of the fragile skin of the leg.

**End of Life!**

The Nursing Times ([www.nursingtimes.net](http://www.nursingtimes.net)) has much useful advice see “End of Life Cultural Differences, Last Rites” viz: Christian, Muslim, Jewish Rastafarian, Hindu, Sikh differences in an approach to death.

End of life requires palliative skills and an awareness of local in house customs with respect to both the patients beliefs while still living and the communities expectations after death. At the end of life such people are unwell, dependent and soon to die. The World Health Organisation ([WHO, 2002 pp91-96](http://www.who.int)) defines palliative care

> “An approach that improves the quality of life of patients and their families facing the problem associated with life threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual”

**Action Point!** While relief of pain dominates palliative care literature, in the field of skin care for all care is prevention of skin failure and attention to such objectives as management of itch, or offloading at pressure sites. The sooner it begins the better, because a first stage of any process is more easy to manage and more reversible than later stages. Dehydration, malnutrition and temperature control require monitoring. Where there is poverty and lack of access to care such advice usually comes too late.

Caring for the skin after death is a process requiring cultural competence. Each community may have its own cultural language for the dying, such as ‘gone to a place of no return’, ‘is no more’, ‘dressed in white’, ‘gone to the sleeping...
Volunteers should know from whom to obtain the necessary such as opioids to control pain. (Bennet at al 2012) Palliative care is not only treatment of pain and other symptoms and of disease. It is total care, incorporating emotional, and social and spiritual support. Volunteers have a large role to play in it. Volunteers can help depending on the skills they have and time available. It may be assistance with administrative matters or fund raising, but it can also be active patient care. It can include helping with nursing chores or counselling.

It is not only terminal care of the dying. Palliative care emphasizes the quality of life of the patient and the treatment required to maintain as normal and positive a life as possible, irrespective of the number of years of life left and whether or not eventual cure is possible.

Communities must be made aware of the needs of the elderly, often by starting early irrespective of the number of years of life left and whether or not eventual cure is possible; focussing on this topic in education at school. It can be the focus of a school play. Or “What does Care mean?” can be the subject matter of a prize essay.

Alliances must be formed and Memorandum of Understanding prepared.

**Action! Table Do’s and Don’ts of elderly skin care** encouraged by Skin Carers. Website information is rich in guidance.

Washing: Daily with a wet flannel conserves water.

Oiling: Apply emollients to seal breaks in the skin and increase pliability and decrease water loss.

- Brush and Comb Hair.
- Cut nails, manage callus and provide fitting footwear.
- Remove environmental hazards.
- Provide shade, adequate and appropriate clothing and footwear.
- Home Gardens for health and nutrition.
- Mobility Aids.
- Offloading of pressure points.
- Relief of itch, pain or numbness.
- Provide good company, radio or TV.

**Further Reading**

Global State of Pain Treatment: Access to Palliative Care as a Human Right is at www.hrw.org/node/98936


Managing swelling and ulceration in the elderly.


Krasner DL, Rodeheaver GT, Sibbald RG and Woo KY (2012) Chronic Wound Care(5) Vol 1 HMP Communications Malvern. PA.


Morris J (2012) Ensuring dignity in the care of older people British Medical journal.344: 12 BMJ 2012;344; e533

2) **Body Image**

**KEYPOINTS:**

*Looking good contributes to wellbeing and hence to health.*

*It is possible to be welcome because of talents other than beauty.*

*Natural is Beautiful. With lifelong low cost, low technology care of the skin, costly, ineffective or harmful remedies should be avoided.*

*Body image can be enhanced by carers. They should be educated about ways to enhance it. Carers should be given help and rewarded, especially where ugliness prevails.*

**Relevance to Skin Care**

The social aspects of body image are central to skin care. The social view is highly dependent on how the rest of the world interprets what they see when catching sight of you. It is helpful to be attractive to others.

**Happiness** There is a relationship between happiness, self esteem and satisfaction. Caring is one resource which provides happiness and satisfaction. (See Section11( K )Kindness) But the cost of maintenance of beauty and the pursuit of happiness is often disproportionate to what a family can afford. Too much of family resources may be diverted to enhancing appearance and often also on ineffective remedies. See (Y)Ying Yang.

There is a powerful and costly body for marketing the cosmetic.

**Warning!** The desire for an acceptable body image is very strong and so is the describing of the contribution of the cosmetic to wellbeing and hence to *Health for All*. For the Skin Carer there is no greater contribution to well being than restoring the good look feel good factor. Recipients of skin attention include those paying for botox, skin piercing, tattoos, the fashionable shoe, the enhanced breast, and the redesigned face or vulva. But these are mostly assaults on the skin and a burden on family income.

There is a view that involvement in cosmetic dermatology trivialises our speciality. On the other hand *Quality of Life* studies show clearly how good looks and absence of disfigurement contribute to health. They also drive a market and acquire riches for the
practitioner some of whom market the view that you must not have signs of aging or hair loss.

**Action Point!** Skin Care must be patient centred, their beliefs about failing good looks must be listened to, but not always acted upon. It is a strong component of skin care to make your patient acceptable and welcome and also to recognize diversity. Fashion is important in developing belief about appearance.

Exploration with Medical Anthropology can provide a significant partner.. Its literature contains many insights into the cultural background of good health which has often been destroyed by the ignorance of the carer or colonizer.

This topic overlaps with several other programmes discussed in other sections of the ABCD. Why those with white skins like to be ‘tanned’ and those who have pigmented skin see lightening as an indication of prosperity and superior caste has for some time been of concern because the management of such is even life threatening? Some of the issues relating to privacy and the maintenance of dignity as well as the display of the skin were discussed by Ryan and Kaur (1997)

Too much or too little and especially patches of pigment loss or gain is the third commonest reason for appeals for help from the skin carer. Melanocytes may be too few or too many and their manufacture of melanin or their migration defective. The condition Melasma is most influenced by the sun and In winter months it spontaneously improves. Several disorders of the skin with loss of pigment require advice on the skin ‘s behaviour in the sun. Those affected by albinism need shade, sun block and clothing as well as regular surveying of the skin to detect cancer. To ensure that they can get employment out of the sun they need to be educated for indoor work and schooling must be sensitive to their defective vision and sometimes defective hearing. On the other hand those who acquire vitiligo are thought to have antibodies destroying melanin and these are diminished by sun plus psoralans or narrowband UV exposure

**Action Point!** There are some advantages in emphasizing Natural is Beautiful, and in the marketing of Self Esteem when it makes people happy and cost controlled. Black/brown is also beautiful viz: in the management of skin pigmentation disorders including the abuse of skin lightening products.. See Karelas (2011)

Much, both good and bad, is learned from glamorous women’s magazines and some publications such as, Beauty Zambia, in one of the world’s poorest countries may be a prototype for social marketing of health messages.

Managing disfigurement is key to adaptation and self management. The self acceptance is part of participation. Guidance can be helpful, especially about ineffective or very expensive purchases. *Positive Activity Interventions* can be formulated to create happiness when
depression is due to skin conditions. Improving *Capacity to Adapt and Self help*, which is the latest definition of wellbeing discussed by the WHO, records both the emotional and the science content of studies of care of the skin. It is induced by the kindness component of Care (see 11K-kindness). It includes Happy Family participation, and often an extended family. Where there is a one child family care of the elderly may require participation by the community as does care of orphans.

Concurrently, ANAMED (see 20) is circulating an excellent poster on Skin Lightening decrying the use of mercury and strong steroids, and Morrone of INMP (see13) in support of *The Right to Beauty between Ethics and Aesthetics* circulated a document entitled “The Cost of Beauty” decrying the marketing of expired or fake topical medicaments, and those containing harmful ingredients.

There is a balance between making those affected by disfigurement confident in display but not embarrassing the onlooker by too public a presentation. Drawings by the dermatologist David de Berker illustrate this point in Ryan and Kaur (1997)

Community Dermatology has to be aware of need but also protect families from the often high cost of interventions and from ineffective and harmful remedies. Sexualisation of Society for a marriage market or finding partners includes unrealistic ideals of beauty.

In seeking to prove capacity to benefit skin carers must be knowledgeable about imperfections and have skills that avoid such when treating the skin, such as avoiding disfiguring scars or stitch marks on the face from leaving stitches in too long. We must show excellence in Aesthetic Medicine. But there is a fine line between educating about managing defective skin function and cohesion to do something about it that will enhance the educators income. Some therapies such as bandages are unattractive. Thus the author in one publication superimposed bandages on the legs of the portrait of one of Ruben’s most beautiful women and immediately they became less attractive. On the other hand a careful use of clothing can camouflage defects as unseen in the legs of the statue of the Venus de Milo, made invisible by her dress. Would she be a model of beauty if her legs were exposed?

There is a view that patients are customers and we are physicians, not shop keepers, as service providers. We must provide for resource poor countries low cost therapies and advice against costly products. However, where very often in many countries ones earnings depend on selling higher cost products, this may be a dilemma.

There is no doubt that some common diseases such as psoriasis respond best to new anti-cytokine biologicals but these are very expensive and unaffordable. Some prescribers will promote them to all because they are such enhancers of their income.
Warning! Loss of dignity is especially likely in palliative care where there is fatigue, difficulty in feeding, toileting and mobilisation.

Action Point! In these circumstances the carer needs to have self training in management of fatigue and despair as well. Indeed Australia’s legislation makes an annual two week holiday not only insisted upon but covered financially and with human resources.

When the skin fails it should not mean having no capacity to benefit. The London 2012 ParaOlympics demonstrated success when there is failure of some abilities. Stephen Hawkin’s words are worth repeating. “We are all different, there is no such thing as a standard or run-of-the-mill human being, but we all share the human spirit. What is important is that we have the ability to create. This creativity can take many forms, from physical achievement to theoretical physics. How ever difficult life may seem, there is always something you can do, and succeed at.”

Further Reading


Jablonski N g (2006) Skin: A Natural History University of California Press. Berkley California. pp266


3) **Climate change:**

**KEY POINTS:**

*The climate is changing and will harm the skin.*

*The skin is designed to protect the body from the environment: there are simple ways to assist it.*

*The greatest threats come from water and food security, human shelter and settlements, and resultant population migration. The contribution to counteracting each of these by the carer of the skin is described on this web site.*

*Environmental waste in Health Care must be reduced for the overall carbon reduction strategy to succeed.*

**Relevance to Skin Care**

The skin is the organ most exposed to the environment. Sunburn, chilblains, trench foot, or the changing prevalence of biting insects all make this topic one of the most significant items in skin health promotion.

**Warning!** In 2012 during a cold spell in Turin, Italy the death rate went up by 58%. The death rate from cold from sleeping on the streets in January 2011 in Northern India was the highest ever recorded. 70,000 people died in 2003 in Europe in a heat wave. More people die of heat in Australia than any other natural hazard. As many people die from cold. Several skin problems are worse in winter and others worse in the heat. While people in Finland do not die of cold or in Aden they do not die of heat, it is those with less extreme temperature experience who suffer most. For one thing their houses are not built to withstand such temperatures and one must strive to improve the thermal efficiency of housing. (see section 8 (H) Housing)

**Warning!** Julian Sheather the Ethics Manager BMJ Writes *Apocalypse Tomorrow* BMJ.com /blogs and Henry Nichols BMJ2011 343 :d6893 both write about its urgency and how close we are to “game over”. The harm is already occurring in higher latitudes and the hazards affect all the animal kingdom and plant life. ‘Science’ weekly 2010-2012 published several articles on Climate Change and Vector shift addressing some of the ways in which the skin will be attacked by infective organisms due to the vector sensitivity to heating, cooling, wetting and drying. The German review Zacher (2012)points out that in spite of the grave
consequences on the health of the world population, health hardly plays a role in the international climate negotiations.

Global temperatures are expected to rise during the life of our current grandchildren to levels that none have experienced in the past million years, a period of time which is the one in which the human species evolved.

**Action!** Doing nothing is not an option! We must prevent reaching a heating point that “triggers a massive release of carbon stored in the soil, permafrost and forests”. Runaway climate change is a possibility and although there are intellects that say climate change is being exaggerated, none should say “do as little as Dermatologists!” Our influence must extend to all animal and plant life. Crops may increase in some places but drought is expected in many areas. We cannot ignore susceptible communities in forward planning. Crops should be enabled and forests replanted. There are far too many people to feed. Empowerment of women, contraception are considered important solutions.

The Campaign for GREENER HEALTH CARE has produced a curriculum of learning Objectives for Medical Students [www.greenerhealthcare.org](http://www.greenerhealthcare.org) it should be read by skin carers too. We should add to it our skills in surviving hazards of Climate Change.

**Action Point!** There are undoubted skin health benefits by tackling climate change, as was and continues to be emphasised in articles in medical journals. Environmental waste in Health Care must be reduced for the overall carbon reduction strategy to succeed. Converting waste to charcoal dust which is then used in compost and dug into the earth is one way of returning carbon to the soil. [www.carbontrust.co.uk](http://www.carbontrust.co.uk). Staff education concerning hospital and health centre waste must be followed up by making it easy and safe to manage waste.

We do not need to always use **hot** water (See section23W) or for that matter washing machines which are extravagant users. Extra clothing substitutes for central heating. Telemedicine and mobile phones substitute for access by road or by air.

**Warning!** The consumption of water is too much and bottled water is drunk in excessive amounts. When doing so for sports events if there is weight gain then too much water has been drunk.

More self help mobility to achieve access would be good for skin care, A reduction in fuel utilisation occurs when cars are replaced by bicycles. Much more could be done to care for the environment in the face of climate change, and to add better nutrition to care for the skin. See Nutrition and Gardens for Health(.section 15N-Nutrition.)Climate change literature on management of hazards viz: sun burn and skin cancer, photosensitivity, too hot or too
cold, or water immersion, includes a long history of interventions and acclimatization skills. Exploration Societies’ and ‘Armed Forces’ literature, on coping with extremes of climate, can be read. More recently as a special focus of the ISD, there is the addition of how to reduce the contributions to climate change.. There are other benefits to this approach such as for example, discouraging deforestation by emphasising to local people their forest’s contribution to their herbal medicines. Like almost every letter of the ABCD, one only has to Google this topic to get a wealth of supporting material.

The barrier of the skin between the body and the biting insect could yet be improved by more research. The mosquito net is not the only possible outer clothing nor is malaria the only disease to benefit.

There will be more sea, so living with salt water versus fresh water is just one route to be taken. Research into so far little examined but plentiful living organisms such as micro algae may help all to live with climate change. (The Hindu Dec 8th (2011) p 18)

All recreational areas of institutions such as schools should build adequate shade.

**Action Point!**
The following low technology ‘Hints’ were adapted from those currently provided by the Red Cross in Australia

**MANAGING COLD WEATHER**

- When cold weather is predicted and access to shops may be impossible buy in extra food and water.
- In cold weather, wear several thin layers, rather than one thick layer. This is because they trap warm air close to the body. Wind and draughts contribute greatly to cooling. Explorers carry light weight foldable wind shields. These are not expensive. One’s outside should be shielded from the wind and be insulated from the cold earth.
- Go for clothes made from wool, cotton or fleecy fabrics, if possible
- Draw your curtains, as soon as it gets dark to stop the heat escaping and the draughts coming in
- Keep any windows and internal doors closed when it’s cold – this will keep heat inside, where you most need it
- A lot of heat is lost through the head and neck, so if you’re chilly indoors, try wearing a hat and scarf
- Your body keeps warm by burning food you’ve eaten, so make sure you have regular hot meals that contain carbohydrates, such as potatoes, pasta, bread and rice. Try porridge with hot milk for breakfast and soups and stews for lunch and dinner.
- If you’re sitting down, a shawl or blanket will provide extra warmth. You should also try to keep your feet up, because air is cooler at ground level.
- Wear warm clothes in bed. When it’s really cold, wear thermal underwear, bed socks and even a hat.
• Do not remove clothing if exposed to cold sea rivers and flood water..


**MANAGING OVER HEATING**

**Action!** Keep out of the sun at its most heating by planning outdoor activities in the early morning. Know where there is shade or perhaps the supermarket library or community centre with air conditioning. Use an umbrella. The Principle of shade and space between the shield and object in the shadow can be applied to buildings as well as living creatures.

Wear loose clothing of natural fibres. In your house draw blinds or curtains. The head and neck will lose heat if cool water is applied and allowed to evaporate. Use an Asian fan but wave it without too much vigour. Drink plenty even when not thirsty, but not alcohol or sugary drinks.

Mosquito nets are heating and where affordable window nets, and sprays should be in place with fans over beds.

Think of others and set up networks, using perhaps mobile phones, to keep in touch with the vulnerable.

 Barrier function and breaks in the skin surface are also susceptible to temperature changes. Take for example the chronic break in barrier function that is the leg ulcer, it is clear that the use of emollients in winter could counteract the effect of late summer high temperature on chronic venous insufficiency and the dryness and epidermal breakdown that follows in the winter.

The cleansing of water is addressed in section 22 (W) Water. Emollients can improve barrier function against dirty water and prolonged wetting and mud. It is a need of the skin when diarrhoeal diseases threaten its breakdown.

Ghazi et al(2012) tested children’s clothing and found them highly photoprotective compared to sun screens.”Placing fabrics in layers is essential and this enables the protective effect to be greatly increased. “

**Further Reading**


Ghazi S, Couteau C, Paparis E, Coiffard LJM (2012) interest of external photoprotection by means of clothing and sunscreen products in young children. JEAIV 26; 1026-1030


Hamilton A (2011) Drought busters, the world is getting thirstier. Five ways we can keep from going dry. October 3 .47-50 TIME magazine


Health Care without Harm. www.noharm.org/europe


Winefred Zacher 2012 Climate Change and Health-Time to act; Facts and conclusions for industrial and developing countries www.german watch.org/klima.health12.htm.
**4) Diagnosis: the art of Dermatology.**

**KEYPOINTS:**

*The recognition and naming of physical signs in the skin is the art of dermatology. Recognising predisposition and weaknesses in the constitution are more characteristic of Asian Systems of Medicine.*

*Skin failure presents in four ways with failure of barrier, thermoregulation, sensory acumen and communication.*

*It is a priority to diagnose first that which is most common.*

**Relevance to Skin Care:**

Diagnosis is a prime skill of Dermatology, existing as a) In biomedicine the naming of physical signs using sight touch and odour and to a lesser degree being a good listener. There are the great mimics, syphilis, diabetes and HIV/AIDS. Another system of diagnosis is recognition of function and especially of signs of skin failure; failure of barrier, thermoregulation, sensory system, and communication through the skin.

**Warning!** The Nomenclature of Dermatological Disease is huge and skin specialists spend a life time learning it. Diagnosis and the naming of physical signs include learning Dermatology’s descriptive language. Terms such as macule, papule, nodule and the distribution of rashes are useful more for communicating the nature of the disease from one expert to another.

Stanford University has developed a list of 25 technique dependent physical diagnostic manoeuvres that they teach their trainees. examining the skin is not included! Vergehes and Hoewitz (2009)

Images of the skin are static and frequently not life sized. They rarely illustrate the dynamics of skin diseases such as the scratching of itch or the oozing of acute eczema. (Ryan2011) How does one know someone is itching unless they are scratching?

Other systems of medicine such as Indian or Chinese systems of medicine have different forms of diagnosis. They give more time to questioning and they detect changes in the
constitution using terms that in nature indicate excitability or lethargy, overheating or cooling such as heat or wind. They are concerned with balance. See Y- Ying Yang. The emphasis on the constitution was a feature of terms such as extrovert or introvert and Sheldon’s body types Ecto-morph or Endo-morph. (Parnell 1958)

**Action Point !** Technologies aiding diagnosis will be addressed according to cost, availability and suitability for resource poor regions. It will include preparing algorithms and atlases. Impetigo, superficial cutaneous mycoses, scabies, eczema, pigmentation defects are amongst the commonest diseases and they should be therefore top of the list for teaching carers of the skin.

Diagnosis of less common difficult to diagnose skin conditions will include the taking of skin samples and Dermatopathology with a simple guide to obtaining and interpreting a histology report. It may include an ISD address list of Dermatopathologists or Departments willing to provide a service, led by the Austrian Helmut Bertraminelli’s article in the CD of the ISD. Capacity to benefit, www.skincareforall.org. The cosmetic industry has advanced the technologies of barrier function measurement. The tools of measurement of trans-epidermal water loss or skin hydration are easy to use and provide rapid answers, although being high technology, they are not cheap. Corneocyte collection and tests of their health are even easier and very cheap. The skin’s repair response and the measurement of inflammation response to injury are also not difficult to test and record.

There is a case for examining, diagnosing and treating skin function failure as well as for diagnosing the thousands of named skin conditions especially in determining primary care community interventions.

History taking is always thought to be fundamental to diagnosis, but oddly in the USA Dermatologist’s Teaching Sessions when presenting’ cases ‘to each other discourage it. There are three approaches: 1) ‘Spot’ Diagnosis with little questioning. 2) To take a history and functional enquiry relevant to the skin lesion or 3),as with Asian systems of medicine, to question at length the underlying constitutional imbalances that predispose to that lesion. This latter approach is more often taken by homeopathy, Indian and Chinese systems of Medicine. The skills are not confined to observing with the eyes but may include taste and smell with odour, and touch is important too. Predisposition and weaknesses of the constitution are detected as a priority by Asian systems of medicine using in depth questioning, tongue and pulse diagnosis.

Increasingly a fourth approach is the Investigative tool viz: Xray CCT MMR, genetic coding. **Neglected Tropical Diseases** will clearly be investigative partners each with their own guidelines on diagnosis of skin presentations.
Diagnosis in the Developed World increasingly relies on the laboratory. Where there is no access to such, or where there is no refrigeration of reagents, explains the development of for example the syndromic management of STI. (WHO 2001) Mahé et al( 2005) searching for simple and cost–effective training procedures further developed the algorithm to be used in dermatology

Diagnosis determines the receipt of appropriate therapy viz:- identification of Snake bite or Spider bite within 72hrs for access to anti-venoms where appropriate. Unnecessary use of ineffective venoms is also to be prevented.(Isbister and Fan, 2011)

Over diagnosis is perhaps less costly in Dermatology than it is for disease of internal organs where consequent further investigation and treatment is frequently exorbitant.

Gregor Jemec(2012) who writes a regular editorial for the EADV newsletter states

“Many clinical skills are being replaced by tests and proponents of this development cite scores of studies that show that many clinical observations are fraught with bias and inaccuracy, detracting significantly from their practical utility with regard to the registration of physiological changes in patients. This may sometimes be true, but proponents of this view forget two very important aspects of physical examination: the added cost is nil, and the benefit to the patient is immense- a cost-benefit ratio we all like.

A skilled physician can perform a physical examination very quickly, not slowing down the consultation process perceptibly; but even the most cursory examination is often well perceived by patients. On the other hand the magic of interacting with patients, of touching the diseased skin and of letting the patient see that your involvement is such that you must look carefully at lesions yourself is great. The physical examination is an easily understood sign that you care about their problems, and their is no greater service you can do to your patients-even if you have to supplement your examination with a few tests later on.

Further Reading


Parnell R W (1958) Behaviour and Physique .London Edward Arnold (Publishers) 1-134

Vergheese Aand Horwitz RI (2009) In praise of the physical examination .It provides reason and ritual, BMJ 339 1385


5) **Empowerment of Women:**

**KEYPOINTS:**

*World wide skin care is most often provided by women.*

*Masculinity is the greatest enhancer of environmental threats, including strife and climate change.*

*Choosing boys over girls leads to the marketing of women for sex.*

*Up to a billion women worldwide have been beaten, coerced into sex or otherwise abused in their lifetime.*

*Women more than men reinvest economic gains back into their families and communities.*

*Surrounded by more successful women men also need empowerment!*

**Relevance to Skin Care:**

The history of this topic in a dermatology context was published (Murrell, Ryan and Bergfeld, 2011)
Warning! There is the role of gender in the developing world? Contraception and pregnancy is poorly monitored where there is poverty. Sanitary pads are less affordable and teenage girls loose much schooling. Diseases affecting the vaginal mucosa are not yet everywhere diagnosed by experts in the skin rather than in STI clinics or by attending a gynaecologist.

The Guardian 13March2012 Rachel Williams reports from Malawi “My future was doomed because I’m a girl”. “Loveness Salami had agreed to marry the man who proposed to her one day as she was selling bananas, when she was older, at least –she had only just turned 13. But as soon as she said yes, he started pester her to sleep with him. One night she found the 20 year old waiting for her in the dark. This time he told her he was going to have sex with her whether she liked it or not. But it wasn’t rape, she says–she gave in.

Loveness knew nothing about contraception, and didn’t understand why she missed her period that month. In Malawi a girl who is pregnant can’t go to school. Nor can she go back afterwards, unless a relative takes care of the baby. Loveness moved in with the man, but he beat her, denied her food, and dumped her clothes in a pit latrine when she left him.

The WHO Commission on the Social Determinants of health (2008)stated:-

“Improve the well being of girls and women and the circumstances in which their children are born, put major emphasis on early child development and education for girls and boys, improve living and working conditions and create social protection policy supportive of all, and create conditions for a flourishing older life.”

Warning! The leaflet advertising the Ethiopia -Aid Addis Ababa Fistula Hospital states

This lack of effective healthcare facilities is not the only reason why this problem is so common in Ethiopia. There are certain traditional practices which make life much harder for girls and women. Firstly, there is the problem of early marriages. Girls as young as four or five are betrothed and intercourse takes place before their teens- little wonder then that many of the patients of the Hospital are teenagers.

The other problem is female circumcision. We can scarcely imagine the pain and agony this horrific practice must cause young girls, whose bodies are mutilated without their consent. What is certain is that it greatly increases the risk of complications during pregnancy.

Each Nation needs a tertiary hospital based multidisciplinary team including psychologists, sexologists, urologists, obstetricians, gynaecologists and paediatricians with th capacity to reconstruct the harm done by female genital mutilation. (Foldes etal 2012)

Warning! There has been neglect and confusion about the exact nature of disorders of vaginal epithelium, and this a global problem affecting the wealthy as well as the poor. Care
of the breast has improved but a focus on breast cancer has led to a debate about the cost effectiveness of Breast Clinics and anxiety about body image has greatly increased breast reduction or the technology of implants. The breast is a skin adnexal tissue and skin carers need better guidance on the advice required on many aspects of breast care—not just the nurse advising on breast feeding.

**Action!** Setting up vulva clinics by dermatologists, rather than as a branch of venereology, or gynaecology, has made a big impact in the last 20 years. Such clinics in tertiary hospitals are often ‘combined’ with all three professions represented. Vagina Clinics sort out STI and Gynaecology diagnosis from skin conditions such as Lichensclerosis et atrophicus and Lichenplanus.

**Warning!** In Saudi Arabia where 69% of women are overweight, girls are banned from participating in sports in state schools. The 2012 Olympics was the first to have women participating from all countries. There are still some male dominated false perceptions discouraging healthy behaviour of women. Sheikh Abdullah al Maneea of the Supreme Council of Religious Scholars stated that the excessive “movement and jumping” needed in football and basketball might cause girls to tear their hymens and lose their virginity. Harrod H and Mitting F SEVEN (SUNDAY TELEGRAPH) 15/04/2012

**Action Point!** Promotion of women professionals in senior and academic posts to allow take up of the above advocacy of rights for women.

There is the story of effective management of microfinance by women in the Developing World. See articles by Fuller on Podoconiosis for a good example of rewarding women for greater care of the skin of the foot. All financial contributions to women were returned on time, in full, after obtaining employment. See CD “Capacity to Benefit” Int Soc Derm.2011 www.skincareforall.org

**Warning!** Female Genital Mutilation.

There are over 137 million women who have undergone female circumcision. It includes an operation, infibulation to remove the labia majora and minore, clitrodectomy, and *Sunna* a minor operation on the clitoris. There may be immediate haemorrhage, retention of urine infections such as tetanus or from instruments used, transmission of HIV. Then follows dysparunia, difficult menstruation, difficult child birth and consequent vaginal fistula, as well as maternal death. In many parts of the Muslim world it continues 100% where men will not marry a woman who has not been circumcised and woman fear being unmarried.

Mohaoud Eman in a student Health Service Research project while at the Regional Dermatology Centre in Tanzania studied FGM in a village in Jijiga District Somali Region Ethiopia. Aided by nurses and tossing a pen to point to houses to be visited all females
(380) aged 5-49 were interviewed and examined. The rate of FGM was 100% with infibulation being the chosen type for 90.2%. In spite of the attempts to educate the population on the contrary, 80% of the women encouraged it for fear of being unmarried and almost all the men interviewed said they would not marry uncircumcised girls.

Simpson et al (2012) provides additional educational resources.

**Action point!** to provide Health Education and local leadership. supported by many WHO linked organisations

**Menstruation:** Many girls are missing school. Sanitary pads are lacking. There is a lack of privacy in schools for managing menstruation, Green Templeton College Oxford is running a study of alternative disposable sanitary pads.

Male Dominance causes families to give more care to male infants. Many serious problems are being addressed such as reducing infanticide of female children. Technologies used for diagnosis of gender such as ultrasound and abortion are necessary for other valid interventions. Policies that manage inheritance and dowry issues should be encouraged.

The pregnant female is omitted from trials of therapy so she is at a disadvantage when it comes to knowledge about therapy.

**BUT:**

**Warning! “The boys who are left behind!”** Sunday Telegraph.UK.Leader August 19th 2012-08-20 Girls now do consistently better than their male counterparts at school. In the UK women form the clear majority at university. By 2015 90% of vets will be women. This may be the case for all professions by 2015. Men will be left behind to be the child carers perhaps not their genetically determined role.

Eunice Kyei Baffour from Kumasi Ghana, in 2001, for her Diploma of Dermatology dissertation, interviewed 220 Commercial Sex Workers. Under the heading of empowerment of women she states that “sexual intercourse should be for pleasurable feeling, expressing love, becoming pregnant by choice, and to avoid STI and unwanted pregnancy women should be able to choose their sexual partner, negotiate when to have sex, choose when or if to become pregnant, prevent STI and be free from sexual violence and forced sex”. There is an urgent need to make education more attractive for boys if bitterness and resentment is to be avoided and indeed empowerment of women is to be in balance.

Perhaps the most alarming example of male dominance is the figure 3.1-6 million abortions of female foetuses in the past decade in India. According to The Lancet it is
wealthy families who pay a medical profession that is susceptible to the financial reimbursement offered.

One of the greatest needs if mankind is to survive is control of population growth. Empowerment of women is needed especially in those countries with rapid growth, to ensure family planning. Ezeh et al (2012)

**Further Reading**

[www.equalitynow.org](http://www.equalitynow.org), [www.fgmnationalgroup.org](http://www.fgmnationalgroup.org)


Arganini C, Daba A, Comitato R, Virgili F and Turrini A,(2012) Gender Differences in Food Choice and Dietary Intake in Modern Western Societies. In Public Health –Social and Behavioural Health Editor Jay Maddock Published by INTECH


Du Mont J and White D (2011) Seeking a better world for women and girls: a moral and political movement is needed to end gendered oppression. British Medical Journal 343: 1130


6) **Function restoration:**

**KEYPOINTS:**

*Skin failure is commonly due to loss of one of four functions; failure of barrier, failure of thermoregulation, failure of the sensory system, and failure of communication.*

*Physical activity receives much emphasis in public health and has an important role in skin health.*
The barrier function of the skin is amenable to self care low technology management for which emollients are key.  

For Thermoregulation see 3C-Climate Change. For Sensory impairment, and for Communication functions see 2B-Body Image.

Relevance to skin care:  

It is helpful to understand that the skin is not just an organ with several thousand named diseases but that skin care is all about restoration of four functions that are easy to remember.

There is a burden due to failure of barrier, failure of thermoregulation ,failure of the sensory system, and failure of communication through the skin.

1)Barrier ranges from trans-epidermal water Loss(TWL) to full thickness wounds allowing penetration of infections, irritants and allergens,  

Whenever it is penetrated, the epidermis switches into the repair and remove mode . The epidermis makes and distributes chemicals to stimulate blood supply and to activate recognition and elimination of harmful foreign invaders. This is known as inflammation. It is also immuno-surveillance. In its extreme form it is wound healing. See section 22 (X) Xerosis for minimal loss of function and for Action!

2)Thermoregulation, too hot and too cold. by sweating and by increasing or decreasing the blood flowing through the skin to maintain optimal body temperature for all functions including wound healing. Inflammation also brings the skin, which is usually cool, up to body temperature.

A reduction in minimal erythema dose when exposed to UV is an early sign of loss of skin protection.

Action! It is helped by the use of clothing. and control of adipose(FAT) tissue, the body’s natural insulation system. The shade of a tree, or the use of a parasol/umbrella is recommended. Remember tightly wove clothing is more protective than loose weave.  

Sweat spread by body grease and trapped by hair evaporates and cools .In some skin conditions such as leprosy there is loss of this function due to damage to cutaneous nerves.

3)Sensory awareness to touching is especially well developed in the skin of some animals, such as the whiskers of the cat, and it is enhanced in the blind. Sensory loss is a feature of nerve injury to nerves in the skin and in the spine, and brain. It is lost in unconsciousness or impairment of awareness as well as in the neuropathy of leprosy or diabetes. Disturbances of this function underlie both itch and pain. Itch is the single most common skin symptom
(Weisshaar E and Dalgard F, 2009) The brain centres that control the effects of emotion have a strong influence on the enhancement or inhibition of the neural pathways involved in inflammation. Many skin conditions can be modified by attention to depression, anxiety or 
Fright and Flight. Touch, in the form of massage, can have a major affect on itch, pain and anxiety. (Gürol et al. 2010)

Following numbness of the foot in diabetes or leprosy, pressure ulcers and amputation are a common consequence.

**Action!** Offloading protects against the effect of pressure and shearing forces resulting from the immobility of the paraplegic and the elderly. See also L-Legs to Stand On. www.legstostandon.org,

4) Communication

“The Look Good Feel Good Factor”, “Love at First Sight” or “Colour Prejudice”. It is a form of communication that requires the balance of privacy versus display, with which every mother presents her child for viewing, and on which every courtship depends, and of which leprosy is the prototype of failure. (see also Section 17-Quality of Life.) Wellbeing includes a good Quality of Life. Amongst other things effective functioning includes participation. Skin failure includes the unwelcomeness of the disfigured of which leprosy and elephantiasis or the disfigurements of the severely burned are well-recognized prototypes. They are feared and suppressed throughout the animal kingdom and on stage or screen one leg, one eye or a scarred face are used even to depict the “baddies”. Fear and lack of understanding of disease, disability and death, lead people to taunt the disfigured, assault them, or run away and hide from them. Beliefs surrounding the illness are powerful factors.

**Warning!** Healthy skin is rarely immobile and rarely mostly at 37°C. (Ryan 2011)

Physical activity is emphasised in public health literature. Viz:

“Worldwide, we estimated that physical inactivity causes 6-10% of the major non-communicable diseases.....physical inactivity seems to have an effect similar to that of smoking or obesity.” (I-Min Lee et al. 2012). Ryan (2011) has pointed out that physical stresses transduce biochemical signals without which the skin atrophies and the dermis accumulates fluid. The control of proteases is dependent on a balance between tension and relaxation. Discussions about sport, exercise, exertion, mobility, localised pressure or offloading permeate most of the topics covered by this ABC. In so far as it is modelled for public health needs, there is no better organ than the skin for the study of these effects. All the questions raised by a series on Physical activity in the Lancet 2012 sadly will not be noted by carers of the skin as having relevance because their organ of interest is viewed mostly as a fixed photographic image and never as an organ always on the move.
Action! Management of skin failure should be patient centred, image aware and culturally competent. It is no longer mainly a concern of mostly acute illness. Chronic illness dominates by far, as does living beyond four score years. Key points for self help and physical well being at low cost are skin intactness and mobility, body temperature and control of the emotions, privacy and display with maximum enhancement of the skin for communication.

Further Reading.


Das Pand Horton R (2012) Rethinking our approach to physical Activity Lancet 380; 189 and see series pages 247,258, 272, 282, and 294

Gürol AP, Polat S, Akçay MN, (2010) Itching, pain, and anxiety levels, are reduced with massage therapy in burned adolescents, J Burn Care Res 31: 429-432


Ryan TJ(2011) *The Skin on the move but cold adapted: fundamental misconceptions in the lab and clinic*. Indian Dermatology Online Journal 1:1-7


7) **Global burden of disease:**

**KEYPOINTS:**

*Collecting and presenting data on prevalence is a requisite for obtaining resources.*
*The symptom of chronic itch represents a world wide burden in the community.*
*Ulceration is a common end of life sig.*
*Neglect of those burdened with skin failure can be found everywhere.*

**Relevance to Dermatology**
Factual knowledge of the burden of diseases is essential for planning Community Dermatology.

**Action!** Organise and collect data. This is essentially epidemiology dealing with the common versus rare, and concerning the patient, the work force of carers, buildings, equipment, and all costs. It follows on from the article by Hay and Fuller (2011) included under Capacity to Benefit. [www.skincareforall.org](http://www.skincareforall.org) on how to collect data on prevalence, perform house to house surveys identifying common objectives, experience and practice, see 17 Q- Quality of Life, and consider diversity and unification and the obstacles which have to be overcome.

There are mechanisms for collecting data. These are well illustrated in 213 dissertations on Health Systems Research written by students at the Regional Training Centre in Tanzania, having received instruction on Health Systems/Service Research in May of each year from instructors from Muhibbili University of Health and Allied Sciences (MUHAS). A typical dissertation will have a description of the location, climate and community where the study is done ranging from outreach small villages to large urban based communities. Each dissertation has an introduction setting the scene that includes, the population and its urban, peri-urban and rural distribution, economy, social, sexual and cultural practices, the birth rate, infant and maternal mortality and literacy and life expectancy. Health Care Delivery Systems are recorded. This is followed by a statement of the Objectives. The Methodology is outlined and will cover,

1) study type viz: A cross section survey, a descriptive-exploratory study, a cross sectional analytical study
2) Study variables Thus in a study of the use of Herbal Medicine these were,

1 Extent of herbal Medicine in use
2 Age and Sex
3 Distance from the health facility measured by time taken on foot to the health facility.
4 Cultural Beliefs
5 Level of education
6 Duration of symptoms of skin conditions
7 Availability of herbal Medicine
8 Economic status
9 Types of skin conditions and types of herbs used.

In a study of scabies and tinea capitis the questions are asked:
1 Are health workers able to diagnose scabies and tinea capitis?
2 What drugs do they prescribe?
3 How are these drugs used?
4 Are these drugs available?
5 How common are these two diseases in daily practice?
6 Is there any in-service training of health workers on the diagnosis and treatment of skin diseases?
7 Are there any reference materials eg books, leaflets or instructions on
treatment of skin disease available where they work?

In a study of common STIs and associated factors among fishermen in camps close to Zanzibar town, the requirements included notification to and permission requested from Ministry of Health, Ministry of Life Stock and Natural Resources and Government Leaders of Zanzibar and the local government Leaders covering the camp. Fishermen were gathered together and the research was introduced and their consent obtained. The Variables investigated were

1. What is the prevalence of Common STDs among Fishermen?
2. What is the average number of sexual partners among fishermen?
3. What is their attitude, knowledge and practice of condom use?
4. What is their knowledge of different types of STDs?
5. What is known about their health seeking behaviour?

Sample size was calculated using standard formulae used in statistics. A typical sampling technique would be that used in a study of fissured feet.

(i) A sub community was selected out of two by random sampling.
(ii) One parish out of nine by random sampling
(iii) Two villages out of seven by random sampling
(iv) Households systematically sampled and individuals aged ten and above were interviewed and examined.

It was usual to first seek permission of chieftains of villages and of heads of households.

Skin camps in India

For many years the burden of disease in India has been somewhat superficially assessed by numbers attending Health Centres or Skin Camps. The private practitioner in India provides public service by attending such camps. A local organiser advertises in remote areas that a particular health problem, such as leprosy, will be dealt with by experts at no cost, at a certain place on a certain day. Advice and often therapy is provided even when hundreds turn up. Some organisations such as the Institute of Applied Dermatology, Kasaragod, Kerala will demonstrate the management of Lymphoedema and encourage those affected to sign up for a two week programme at a specified site. See www.skincareforall.org Capacity to benefit.

The Indian Primary Trauma Care Foundation web site states “The Primary Trauma Care Foundation exists to promote and enable the training of medical professionals in the developing world in the management of severe injury. The desired outcome is that lives are saved and disabilities are avoided. We have been conducting surgical and diagnostic camps in many remote and rural areas in Northeast India and other parts of our country. When we did surveys to find how they came to know about these camps. It has been our experience that:

A. In rural areas less than 5% came after reading about the camps in the News paper advertisement or watching it in TV

B. In relatively less remote areas that percentage goes up to about 15%.
The most effective form of advertisement was through the local Churches, the local popular organizations, the local health care facilities and their personnel.

**Further Reading**


Marigdalia Ramirez-Fort et al (inPress.IJD) “Organising a Missionary Medical Clinic in Puerto Rico and involving Medical students is a useful guide.” International Journal of Dermatology in press.


PrimaryTrauma Care Manual ISBN 0-95-39411-0-8
Published by Primary Trauma Care Foundation. [http://www.primarytraumacare.org](http://www.primarytraumacare.org)

**8) Housing ; Home and Health Centre.**

**KEYPOINTS:**

*Well designed and attractive Health Care facilities improve skin care and its uptake.*

*Poor housing in the home increases the prevalence of disease.*

**Relevance to Skin Disease**

This addresses not only where people live but the places in which they are given treatment.
Bad Housing contributes to skin disease. Badly housed health care is unattractive, providing little privacy and often short of equipment. Patients will be disinclined to attend such facilities.

The work force that cares for the patient must also care for where they live or are treated.

Gregory Karelas writes from a small hospital in Nepal

“Last night, after a long day of interviews for our expanding Nepal-based staff, our Storekeeper, Chet Raj Bhandari, came to my office. He took a seat, and we fell into a casual discussion of our typical conversation topics: supplies for our staff, thoughts on systems improvements and how cold the Nepali countryside can get in December. Our chat was pleasant as always. But it was his closing statement that surprised me, filling me with pride that I struggle to describe.

He said, “We [the staff] care so much about this hospital, because it is ours. If we see dust on the equipment, we wipe it. We do not do it because it is our duty, or in our job description. We do it because this is our home.”

Housing is threatened by strife and by climate change. Part of the investment into reducing the hazards of climate change is addressed by improvements reducing cooling, overheating and risks from storm and flooding. Investment against biting insects goes well beyond just mosquito nets over beds and bodies by having mosquito proof netting on windows. Ticks also thrive where there is increased warmth. Managing waste reduces biting insects and rodents that thrive in warmer climates. Contact dermatitis from Parthenium or Oak Procession Moth is in some places very common and such problems can be made worse by climate change but equally can be remedied by reducing exposure in the immediate neighbourhood of housing and health centres.

The open air is an advantage when seeking natural light under which to examine the skin. A study by Thorn Electric found that found that while lighting is important for the diagnostic skills of dermatologists other factors such as having sufficient space and not too small a room, can also improve skills. When addressing the question of access it is clear that diagnosis and treatment depend on attracting attendance. Some treatment centres are very unattractive.

“Patient privacy and good lighting are not mutually exclusive. Bedside curtains could include an upper rim of netting so that not all the ambient light is obscured when curtains are drawn. Frosted glass might be used in outpatient areas. “ Coltart et al(2006)

(This mentioned in a Bulletin in www.global history of Leprosy.org Discussion Point: "Leprosy and the General Health Services of India: Prospects for Greater Integration" by Yasir Al-Wakeel and Professor Terence J Ryan). Some government hospitals are not ideal
routes in to care for patients affected by leprosy being both unattractive and unkind. It is an issue addressed at a symposium hosted by Aldo Morrone in Rome in 2011 on the care of mobile populations in a paper in the International Journal of Dermatology 2012 and in a CD Capacity to Benefit www.skincareforall.org A homely and inviting room rather than the decor of a police cell facilitates both diagnosis and care.

Falling victim to new definitions of care, flowers have disappeared from hospitals. Cohn (2009)

**Greening the health care environment**

The concept of Gardens for Health is new to dermatology. It is not new to Public Health and Community Medicine. Trees and woods can enhance social cohesion between Health Service estates and local communities through joint involvement in planting, maintenance and enjoyment of trees and woodland. The United Kingdom National Health Service (NHS) has a web site www.nhsforest.oxtreegen.com, covering NHS needs and growing forests for health. There is data suggesting that looking out on trees from a hospital bed is healing! See also NHS FOREST GUIDANCE PACK www.nhsforest.org

This NHS Forest campaign is a project set up by the Centre for Sustainable Healthcare to i) improve health of staff, patients and communities through increasing access to green space on or near to NHS land, ii) to plant 1 tree per employee amounting to 1.3m trees iii) encourage greater social cohesion between NHS sites and the local community, and iv) bring together a range of professionals and volunteers to produce woodlands that includes the use of art, food crops, wood fuel and biodiversity. The objective of the NHS Forest programme is to plant 1.3 million trees over five years, equivalent to one tree for each employee, to establish a mature forest for the NHS centenary in 2048 and to realise proven benefits.

Research has shown that patient recovery rates from surgery improve even if they can only view greenery from their hospital window. (9).

Cooper (10) reported that hospital gardens can facilitate stress reduction, help a patient summon up their own inner healing resources, help a patient come to terms with an incurable medical condition, provide a setting where staff can conduct physical therapy, and horticultural therapy with patients, provide staff with a needed retreat from the stress of work, provide a relaxed setting for patient/visitor interaction away from the hospital interior.

Researchers from the Universities of Bristol and East Anglia (11,12) found that people living closer to green spaces were more physically active, and were less likely to be overweight or obese, and people who lived furthest from public parks were 27% more likely to be overweight or obese. Greater opportunities for exercise provided by close proximity to a park reduced weight gain in teenagers by five kilograms over a two year period.

A University of Glasgow study (13) found that, for England as a whole, people living closer to green space had lower death rates and less heart disease. Amongst lower income groups, 1,300 extra deaths occurred each year in areas where the provision of green space was poor.
Trees and woods can have a restorative and therapeutic effect on the mind and especially in the management of children where an environment for play is so essential studies support the creation of a green environment. (14)

Trees have been found to enhance mood, improve self esteem and lower blood pressure. Research in the Netherlands and Japan indicated that people were more likely to walk or cycle to work if the streets were lined with trees and they live longer and feel better as a result. (15)

Two reports (16,17) outlined the benefits to physical and mental health arising from contact with the natural environment. These included the reductions in obesity, heart disease, diabetes, cancer, stress, ADHD, aggression and criminal activity, amongst others.

Numerous studies on green space and particularly woodland have shown that they are highly valued by communities. Access to woodland is not only important for health benefits through exercise but also makes visitors feel ‘happy’, ‘relaxed’ and ‘close to nature’. (18)

Environmental volunteering, including tree planting, can be as effective as aerobics in improving fitness. Independent evaluation of BTCV’s Green Gym concluded (19) that overall the physical health status of volunteers significantly improved, with 99% of participants reporting enhanced health and confidence.

Outdoor spaciousness is advantageous in palliative care when dealing with the attractiveness of a sufferer from an odorous cancer hoping to see more of their family. There are many issues concerning privacy such as overcrowding, or gender issues relating to single sex wards. There are many concerns regarding safety especially with the extremes of life. Many environments have insufficient safe storage facilities not just with respect to people but to animals, flies and other insects. Water supply and toilets are addressed under Water. section 23 (w) Ecological sanitation is highly desirable. It is complicated by high density population drifting to Mega cities and by water shortage.

Housing structure should allow the hanging of mosquito nets. Closed water storage may include plastic bottles placed on the roof for heating by the sun sufficiently to pasteurize. Prolonged exposure over months may degrade the plastic and its safety should then be questioned.

Further Reading

www.global history of Leprosy.org  Discussion Point: "Leprosy and the General Health Services of India: Prospects for Greater Integration" by Yasir Al-Wakeel and Professor Terence J Ryan

Cohn S (2009) Where have all the flowers gone? They have fallen victim to new definitions of care. BMJ 339: 1368-1369


Lovett P A; Halstead M B; Hill A R; Palmer D A; Ryan T J & Sonnex T S (1983) Measurement of spectral reflectance of skins in connection with the colour rendering of fluorescent lamps used in hospitals. Proceedings 20th CIE Conference Amsterdam 1


9) Information Technology,

KEYPOINTS:

The visual appearance of the skin and of dermatopathology make it an ideal object for transmission by telemedicine and the mobile phone. It is far more economic and less carbon consuming than patient access to a dermatologist by long distance transport by road or air.
However there is too much information. Management of information is offered by Health Care Information for All (HIFA 2015) (www.hifa2015.org) which aims that every person worldwide will have access to an informed health care provider.

Its discussion group (HIFA2015@dgroups.org) provides a neutral space for the creation, exchange and use of relevant, practical healthcare information for family cares, primary health workers and district level health care providers in developing and transitional countries.

CHILD 2015 has the same aim for those responsible for the healthcare of children. (www.hifa2015.org/child2015-forum)

Relevance to skin care

Warning: Skin conditions should be seen by the right person, in the right place, at the right time and should move readily between levels of care as necessary. In the developing world there are many reasons why this cannot happen. Information technology may provide an alternative.

Action! Modern Communication Tools: Telemedicine, Apps and Web forums and the mobile phone address images, record keeping, data collection and its security. This follows the current achievement described in the Capacity to Benefit section of this website by Peter Schmid-Grendelmeier. Teledermatology, Apps and Web forums: modern communication tools for dermatology in areas with limited resources. International Journal of Dermatology. www.skincareforall.org

It is clear that ownership by Traditional Health Practitioners of a mobile phone in even the most resource poor regions will have a particular advantage for conditions of the skin which can be so easily photographed. As stated in section 20 a good illustration of the potential of IT is the seeking of an identification of a snake, or locating availability of anti-venom.

However there needs to be a reminder of the requirement for electricity where often there is none, and often there are additional costs. Some people charge their phones with solar panels, but more often, someone in the village has a car battery and runs a phone charging station, going to a nearby town when the car battery needs to be recharged. The phones tend to be charged only intermittently, because this is not a "maintenance culture." None-the-less, connectivity has indeed arrived in the remote areas of the world. Benskin HIF A
2015 August 17th in Ghana. The simple text message is a quantum leap in between person access.

UNICEF has recruited 140,000 persons in Uganda to a SMS social networking group called U-report. It is for transferring through targeted texts information relating to health. see Bonnie Rochman time .com/rochman

Some of the day to day frustrations of dermatology in the Developed World are described by Finch etal (2006)

Its use in Botswana is described by Dr Carrie Kovarik in ISD Connection. www.intsocderm.org

A programme such as the morbidity control of Lymphatic Filariasis in South India has a headquarters centre in Kasaragod Kerala and outreach centres in inaccessible rural areas. Transfer of skills to these centres depends in part on telemedicine contact with the HQ. The telemedicine units were set up in Kasaragod as part of the program to treat poor lymphoedema patients in endemic villages of India. At first the system was connected to Malkhed Community Health Centre in Gulbarga district of Karnataka province and Cherthala in Alleppey district of Kerala. The National Ayurveda Research Institute for Vector Borne Diseases (NARIVBD) Vijayawada was linked. NARIVBD is the monitoring agency authorized by department of AYUSH, Ministry of Health and Family Welfare, Govt. Of India to monitor IAD’s activity of free treatment for poor filariasis patients using integrative medicine. The equipment was connected through the BSNL broad band. As the connectivity was very poor through the ADSL route we adopted a method of calling each other points and then logging on to the telemedicine. LIFESIZE software and hardware used. The doctors from both the centres were simultaneously logging in and a doctor from Kasaragod moderated consultations. Each time a new case was recruited the facility was used to diagnose and to cross check the local pathology of affected limbs (shtaneeya vikruthi). Then the consensus protocol was adopted with mutual consultation. All the entry points for bacteria were examined either by the dermatologist or by the chief Ayurveda consultant from Kasaragod. The complications and the co morbidity were also treated as per the instruction by the doctors from Kasaragod. Compression in complicated limbs could be cross checked by the compression provider in Kasaragod

Table 1: Beneficiaries of telemedicine

<table>
<thead>
<tr>
<th>Consultation</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allopathy consultation</td>
<td>126 patients</td>
</tr>
<tr>
<td>Compression consultation</td>
<td>348 limbs</td>
</tr>
</tbody>
</table>
## Skin care consultation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Complication discussion</td>
<td>89 limbs</td>
</tr>
<tr>
<td>Discharge</td>
<td>48 patients</td>
</tr>
<tr>
<td>Follow up 1</td>
<td>52 patients</td>
</tr>
<tr>
<td>Follow up 2</td>
<td>24 patients</td>
</tr>
<tr>
<td>Follow up 3</td>
<td>11 patients</td>
</tr>
</tbody>
</table>

In 2011 poor broad band facility and connectivity problems seriously obstructed the regular and optimum functioning of telemedicine facility. But this pilot of Telemedicine, although not yet ideal, will surely become so in the near future.

The British Medical Journal (2011) reported that in Barcelona HIV patients get virtual consultations, a telepharmacy, a virtual library and a virtual community. A randomised trial of the effects of a mobile phone short message service on antiretroviral treatment adherence showed significantly improvement. Another trial showed smoking cessation following text messaging Free et al 2011. There may well be many preventative roles for messages in the field of skin care. If it is useful for managing Heart Failure it should be so for Skin Care (Anker et al 2011)

Information for the special needs of indigenous populations with links to traditional systems is the focus of [Http://www.hipoafrica.org/wp-content/downloads/HIPo_brochure.pdf](http://www.hipoafrica.org/wp-content/downloads/HIPo_brochure.pdf)

([http://healthphone.org](http://healthphone.org)) is another Indian example of IT. It has recently released four new videos on basic health knowledge in Hindi, produced in collaboration with UNICEF India; Hand Washing with Soap and Water, Use of Oral Rehydration Salts (ORS) and Zinc, Routine Immunization and Early and Exclusive Breastfeeding.

The audience for these videos is health workers, communities, parents, children. Everyone! Each of the videos is available for free download, in over 20 formats, resolutions and sizes. The aim is to provide this knowledge to people with basic, feature, semi-smart and smart phones, tablets, PCs, PDAs. Next available for download are audio files for radio and community radio; text files for SMS messages. Versions of these videos, with Hindi subtitles, are currently being produced (same language subtitling helps with literacy). They are also being transcribed in Hindi, translated to 14 Indian languages and English. When complete, they will be available, with subtitles in all these languages, on the Health Phone web site and on YouTube.
(http://youtube.com/HealthPhone and http://youtube.com/HealthTubeOrg ) and on the Health Phone channel on Videum (http://www.videum.com/channeldetails/357/healthphone.html ).

The complete health video library will be available on a micro SD card which can be inserted into several popular (and every increasing) models of mobile phones, and other devices, so that no download is required. Available Any time! Available Free!

Nepal is a country where communities are frequently isolated for many months. Jha and Gurung (2011) describe Community Health Education and Services by Telehealth (CHEST) and the Di Skin Hospital and Research Centre (DISHARC) Kathmandu providing dermatological consultations to 50,000 persons in one remote area.

Bill Clinton (2012) in an interview with TIME magazine October 1st states “Phones mean freedom.” He points to a scheme in Haiti where a Canadian bank has encouraged 6 million person to person transactions by phone and in Africa families affected by strife are reunited. Text codes on purchased medicines can be

**Further Reading**

Anker SD, Koehler F, and Abraham WT (2011) Telemedicine and remote management of patients with Heart failure. The Lancet 378: 731-39

Eminovic N, de Kezer NF, Bindels PJE, and Hasman A, (2007) Maturity of Teledermatology evaluation research.: a systematic literature review 156: 412-41


Http://www.healthnet.org/essential-links (a South African resource for perinatal and child health.)


Rada AG (2011) HIV patients are happy with virtual care British Medical Journal 2011;


10) Job selection.

KEYPOINTS:
Skin failure is a common reason for unemployment. Employment with wage earning becomes the best end point and objective of skin care.

The London para-Olympics2012 were an object lesson in participation and raising expectations in sport which should be adapted to the acquiring of employment.

Relevance to Skin Care

Unemployment is a common consequence of skin conditions especially post wounding burns and lymphoedema. Appropriate treatment, adjustment to the work place and awareness of other factors such moderate mental ill-health or musculoskeletal disorders may make a difference.

This applies to the workforce delivering Community Dermatology to recognise the need for those affected by skin conditions to have employment.

The WHO Commission on Social Determinants of Health(2008)states:-

“Make full and fair employment and decent work a central goal of national and international social and economic policy making.”

“Achieving health equity requires safe, secure, and fairly paid work, year-round work opportunities, and healthy work-life balance for all.”

“Improve the working conditions for all workers to reduce their exposure to material hazards, work-related stress, and health-damaging behaviours.”

A technical brief ensuring a Positive Practice Environment Occupational Safety and Health for Health Worker Productivity can be accessed at http://www.capacityplus.org/technical-brief-4/

Providing high-quality care shouldn’t be hazardous to the safety and well-being of health workers. Yet many health workers face a wide range of occupational safety and health hazards and the rate of on-the-job injuries is increasing. This technical brief illuminates the numerous hazards that health workers face on the job. The authors outline ways to make health workers’ safety a higher-level policy issue and show how to create working environments that prioritize occupational health.

This brief is aimed at national health leaders, health policy-makers, and managers of health workers at hospitals and other facilities.
Warning! Lack of leadership in Governance leads to disorganisation especially in commissioning

Action Point! Lobby for Ministry of Health interest in the appointment of good leaders of projects with support of adequate training of all staff for relevant national targets and subsequent audit. Skin conditions should be seen by the right person, in the right place, at the right time and can move readily between levels of care as necessary. In the developing world there are many reasons why this cannot happen. Information technology may provide an alternative.

In the developed world the provision of allowances for the disabled often depends on a doctor’s assessment of a patient’s condition. Work should be encouraged and it is an important clinical outcome of therapy. (Thornhill and Williams (2012)

The written dissertations of dermatology students at the Regional Dermatology Training Centre in Tanzania includes studies of industrial causes of skin failure.

Hairdressers Rebecca K Kasolo in 2009 reviewed 132 hairdressers in four wards of Wote Town Makueni District for occupational hand dermatitis (prevalence 53.8%). The use of personal protective equipment totally prevented dermatitis in 15 of 132 while in those who were not always protecting themselves all had dermatitis. Good training avoided the problem and it was most prevalent in trainees who as is well known in earlier European studies, get given the more irritant work.

Health Workers Post Exposure Protection (PEP), ‘sharps’. Exposure to trauma from ‘sharps’ (needles and blades) became a greater world problem as viruses for hepatitis and HIV/AIDs were increasingly transmitted by needles and blades. Disposal was studied in 222 Health Workers of which 52.7%(117) had exposure of which 97.4% had HIV testing. 36 used post exposure therapy and 81 did not. Although the service in Bunguma district hospital Kenya was 100% available to all workers many did not receive antiviral drugs unless seen within 72 hrs or did not use these services.

Mining Clement Mwale’s study in the copper mines of Zambia in1993 confirmed a high prevalence of industrial dermatitis in those with gumboots and working underground. On Mwale’s recommendation it led to greater interest by the mining authorities in providing better skin care skills. The recommendations arising from these studies often have a local affect. Another study was of coal miners in Malawi which found that Industrial Contact dermatitis (mostly irritant or allergy to rubber boots) with a prevalence of 38.5%, had been largely ignored by the industry and health service providers. In the more irritant
environment of cement factories (Adreiano Kisengere Dares Salaam 1994) the penetration of cement dust into clothing revealed the impossibility of reducing contact dermatitis by this means. Violet Bakari found fungal infection more (65.5%) of a problem in the cement factories of Tanga Tanzania and Irritant dermatitis affected only 11.5%. She investigated the availability of 13 appropriate drugs and found the workers knowledge was nil, the likelihood of purchasing the wrong drug was high and only 3 out of 13 of the drugs were available in a local health centre.

**Warning!** Having a skin problem often leaves one without a job. Vulnerability to climate change and environment as well as Contact (industrial) Dermatitis, and other occupational hazards are well described. Avoidance, by using protective devises, is well described and not costly but may rely on donations. viz: footwear for podoconiosis, hats for persons affected by the sun. Apart from the obvious Industrial Dermatitis, and lowered resistance to wear and tear, there is often loss of manual dexterity and foot control of machinery.

The end point of successful caring of the skin is getting back to living a satisfactory life. Having a job or being able to return to looking after house and family is part of that story: again this relates to adaptation, self help and Income generation mentioned in (8) and (16).

**Action Point!** Guidelines must be prepared for persons affected by skin disease. They are needed for job centres and employers as well as for the patient. It is 30 years since The International Year of Disabled People when the UK’s Royal Association for Disability and Rehabilitation invited a member of the UK Psoriasis Association to write about employment for people with skin disease in Employers Guide to Disabilities. An environment with stable ambient temperature is essential for those whose thermoregulation is impaired. The consequences of skin disease including sleeplessness, fatigue and extra time taken to treat. There is bacterial load in exfoliated scale, the need to have topical therapies on site. There is the problem of acceptance by other workers. The role of the carer of the skin is first to ensure the understanding of the employers.

As a large component of public health, one aims to get meaningful occupations for people with disabilities who are marginalized by stigma, poverty, chronic illness and even violence

As illustrated in Tanzania where persons affected by Albinism have been murdered for body parts to satisfy practitioners of witch craft. ‘All of the above requires effective solutions, Good management and administration must be supported by a legal framework, Human Rights and a supportive local and national Government.

**Warning!** Job availability can depend on deeply established Cultural and Political perspectives of class and colour. Abolishing Untouchability is a distant dream in most villages of India. Colour prejudice exists in S Africa even when Apartheid has been outlawed.
**Begging:** Some patients with skin disease prefer not to work and earn a living by begging. Instead of trying to heal their wounds they perpetuate them by traumatizing them. One aims to raise their self esteem and give them some dignity. For example in the Leprosy Field giving goats to those affected has sometimes resulted in raised self esteem through becoming an owner of an animal on which they have to bestow care. It may make them, as an owner, more respected by the local community.

Giving a beggar a house to live in is sometimes a success but they may rent out the house and not live in it.

**Further Reading**


WHO. Commission on Social Determinants of Health Final Report Closing the gap in a generation www.who.int/social_determinants

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11) **Kindness and Cultural Competence**
KEYPOINTS:

*Kindness is making welcome, talking with empathy, touching, being on the same wavelength and it is cultural competence. An endpoint is patient satisfaction and happiness.*

Relevance to Skin Care

One only has to read (A) aging above to see that there is a need for kindness. The BBC Radio 4 recently asked who now teaches kindness? There are long periods of life when persons are dependent on self help as well as periods of life when one is dependent on others. At other times those untrained and unpaid with time to spare for caring have to compete with the demands of consuming and working.

There are important tales that illustrate kindness such as the Good Samaritan, Father Damian treating persons affected by leprosy on Molakai, Treves and *The Elephant Man.* Kindness is mediated by word and by touch. Compared to the past we are much better at discussing sex but much worse at discussing dying. In hospital we provide complex interventions which cannot rejuvenate and at the same time we are not providing much needed comfort. Osler advocated equanimity but a scientific training and/or exposure to an excess of distressing illness may eventually deaden one's emotional centre. Spiro (1992) wrote of loss of empathy during training and later over exposure and over work. He recommended the sharing of stories about individual’s lives. This is something less often heard when medicine is based on trials of therapy in large numbers or on studies of the genome.

A programme entitled *Skin Care for All* cannot ignore the Kindness component of Care. Jemec G (2011) wrote about “The oil that allows the machinery of interpersonal relationships to function smoothly.”

The good listener and the caring component of Care will lead to patient centred exhortation to encourage adaptation as well as enhancement of self management. Compassion, sympathy, empathy, altruism are key components of good medicine.

**Warning!** Unhappiness is what may happen when depression due to skin conditions has not met with *Positive Activity Interventions.*

**Action!** One response to Kindness is Happiness There is a relationship between improved self esteem happiness and self satisfaction. It is illustrated by family participation, or a happy orphanage
Warning! Think about the untouchable: Unkindness of numerically gross proportions. An India of equal opportunities and respect for all communities has remained unfulfilled since both Union and State have failed to eliminate the caste system.

Action! The public health component of kindness is being culturally competent, and trying to be on the same wave length as your patient. Do not have an apartheid which is both unkind and creates barriers. Honour the aged and bring to the fore their much greater experience. See 1) A-ageing.

A contemporary addition to the training of health workers is the concept of Cultural Competence. It is discussed in other sections of this ABCD and it especially applies to primitive peoples. Morgan et al (1997) wrote about how the Australian Aboriginal perceives his or her environment. What they describe has similarities with how all primitive people think on all continents. There is personal Identity (“Who am I?”) integrated with kinship and the extended family, ritual and a spirit world that is inseparable from the land. Ill-health will be reported as related to these and the impaired ability to fulfill obligations to all worlds.

Addressing an individual’s needs may require addressing this wider audience. Health clinics are threatening and alienating. Before intervening the carer may need to tell about his or her own family, place and relationships. Polite behaviour may require not making eye contact and saying “Yes” to every question. Questions should not ask “Why Where or Who?” but request confirmation of why where and who. Meeting the immigrant for the first time in primary health is addressed by Fuller et al (in Press IJD).

Sherry (2010) gives many insights. Kate Sherry takes us through 1) Beliefs of Causation viz: “Epilepsy due to a snake that you cannot see that someone puts in your path to harm you.” 2) The high value of relationships, family, tribe, and ancestors. This is linked to hospitality of those who do not belong, and to showing respect. Time limits may be placed on these. It can justify total dependence and a disregard for self help. But it can also put the family first to the detriment of a disabled and unwelcome member.

Home visits may be the only way to get an insight into disabled persons relationships. Certainly living with an ethnic group is necessary to understand their customs. Experience with Australian Aboriginees about whom Dedee Murrell (personal communication) describes a young population with a short life who have skin conditions which include partial loss of eyebrows and folded skin that may be mistaken for leprosy. Mossy feet describes a condition seen commonly in Australians without footwear and without the lymphoedema of podoconiosis.

Not speaking the language but using an interpreter almost inevitably causes the interpreter to become a culture broker. Identity is difficult to establish, relationships are confusing. The integration with the environment and the influence on beliefs of even rocks need to be
understood. Good manners requires close observation to put into practice, looking away rather than eye contact with women, and to avoid being thought of as bad mannered.

Many of the issues of cultural competence are related to religion. For example, how does fasting affect competence? The Muslim council of Birmingham, UK, when asked whether doctors are compromising patient care when fasting, replied they can be excused fasting but must make up for it another time. (Iqbal 2012)

See Section8(H) Housing and note that where you meet your patient should be culturally welcoming. If it is your private practice which is to be marketed it will be clean and attractive with pictures on the wall. It is unkind to force a patient to meet you in a KGB like prison environment.

The 14th Dalai Lama sayings.

Cherishing others: All living beings, starting with insects, want happiness and not suffering. However we are only one whereas others are infinite in number. Thus it can be clearly decided that others gaining happiness is more important than just yourself alone.

Religious Diversity: All religions share a common root, which is limitless compassion. They emphasize human improvement, love, respect for others, and compassion for the serving of others. In so far as love is essential in every religion, we could say that love is a universal religion. But the various techniques and methods for developing love differ widely between the traditions. I don't think there could be just one single philosophy or one single religion, since there are so many different types of people, with a range of tendencies and inclinations. It is quite fitting that there are differences between religions. The fact there are so many different descriptions of the religious path shows how rich religion is.

In India the caste system is so deeply entrenched as to encourage acceptance of inequality.

Kindness is not just a benefit to the recipient but like forgiving it may be good for the health of the provider. Psychosomatic Medicine 2012;74:745-50

Further Reading


Lyubomirsky et al (2011) Delivering Happiness: translating Positive Psychology Intervention research for treating Major and Minor Depressive Disorders J Alt Compl Med 17 675-663

Jemec G (2010-2011) The role of Kindness EADV News 37: 2

Kate Sherry in Occupational Therapy. An African Perspective Eds Viyan Alers and Rosemary Crouch Camera Press 2010


Lyubomirsky et al (2011) What are the differences between Happiness and Self Esteem 76: 363-404

12) Legs to stand on:

**KEYWORDS:**

The skin of the foot suffers the weight of the body and in the absence of footwear is exposed to environmental hazard as much as any other point of the body. Gravity influences venous and lymphatic drainage and may eventually lead to a failure of both.

**Relevance to Skin Care**

Whether it is a diabetic foot, leprosy, lymphatic filariasis, Buruli ulcer, exposure to the chigger or other parasites, a scorpion bite, venous ulcer or ingrowing toe nail, the need for skin care is central to management. Overall taking into account the demands of the body for skin care more time is spent on the leg for rehabilitation purposes than any other part of the body. The profession of Podiatry is much concerned with skin care.

**The Institute of Applied Dermatology Kerala India**

This Institute is mentioned in the booklet supporting this web site. It has pioneered skin care in the community especially for lymphatic filariasis affecting the legs as elephantiasis. “The programme in India is an extreme example of skin failure amenable to restoration of function. It is devastating the lives of up to seven million persons in India. Agricultural workers in remote villages and fisher folk by the sea take to their beds with the enormous disfigurement of elephantiasis and suffer from intermittent high fevers and painful inflammatory episodes due to bacterial infection.

Community Dermatology at the Institute providing skin care has measured the burden of disease, studied quality of life, focused on empowerment of women, sought clean water and applied the low technology of washing the skin. Using integrative medicine, Yoga and local herbals, as well as advice on healthy eating, all have been applied in a frame work of biomedicine’s physiology. Advice to inaccessible areas has been given through telemedicine. Neglected buildings have been rented and upgraded to become attractive treatment centres. The Indian System of Medicine, Ayurveda, has introduced harmony into the lives of these patients.
Using locally available sustainable and low cost measures, coupled with self help and community participation, their legs return to an acceptable size and earning a living becomes once again possible. Careful measurement, statistical analysis and partnership with the leaders of evidence based medicine and participation with International frameworks of disease have led to international accreditation and increasingly strong support from the Government of India.

www.iad.org.in

**Warning!** Not to be able to walk is a severe disability. Not to be able to stand is far worse and threatens survival. Leg conditions can be classified into those which are unilateral and those which tend to be bilateral. The approach to amputation may differ between these two.

Sadly amputation is often resorted to without an attempt to preserve, which with available technology is increasing possible. The consequences however depend on level of amputation. Restoration of a severely damaged limb by prolonged episodes of surgery and delayed recovery is not always better than the loss of the limb by early high amputation through undamaged tissue with rapid rehabilitation. Being able to stand on one healthy leg is hugely preferable to being a bilateral amputee.

**Toenail cutting.** Cutting other peoples’ toenails, so necessary for the blind or for those that cannot touch their toes, requires some simple rules. It is not necessary to cut so short that there is a risk of injury to the skin. Nails are easier to cut if first soaked in a bowl of water to soften the keratin. The position of both the patient and the carer should be stable and in good lighting.

**Entry points.** Much pathology of the leg is due to broken skin with entry points for soil irritants or for bacteria. It is a feature of Podoconiosis and of Lymphoedema as in Lymphatic Filariasis. Washing and emollients are key therapy. Footwear is protective if appropriately fitted.

**Neuropathy.** Detecting loss of sensation is a key to preventing the ulcers that develop in conditions of impaired blood supply.

However running in shoes as opposed to bare feet adds stress to ankle, knee and hip and adds to the probability of chronic injury.

**Warning!** Lack of awareness of pain underlies one of the commonest causes of ulceration: pressure over bony prominences such as the heel, hip, sacrum and elbow of those confined to bed by unconsciousness or paraplegia, or so ill that they are unaware of discomfort. It is a major cause of the diabetic or leprosy associated foot ulcer.

**Action!** Management and testing of Neuropathy.
Questions should be asked about feelings of numbness, burning feelings like electric shocks or like insects crawling on the skin. Both the patient and the seated examiner must be positioned comfortably while examining. A normal healthy part of the body should be touched and the patient, with eyes closed, asked whether they can feel it and point to the site touched. This can be first practiced with the eyes open. Specialists use a 10g monofilament but a ball point pen is most commonly available. Repeat at several sites and indicate on a drawing of the affected limb, where the skin was tested and where sensation is present or lost.

The most essential management is offloading. Those affected must shift their position very frequently. Lie on soft cushioning (viz: Foam rubber at least nine inches thick) or have the weight bearing area shifted away from the incipient ulcer.

**Leprosy and Diabetes.**

Prevention of injury requires that the patient avoids it. It is especially important to teach the significance of impaired sensation. When the tissue has lost the sensation of touch and pain the injury that causes pain to normal skin and consequent withdrawal must be demonstrated to the patient on normal skin, and then on skin with sensory loss as not causing pain and immediate withdrawal. The patient should be trained to avoid injury and to inspect daily for signs of injury. The family and friends can identify risks and plan how to avoid them. Training to care for wounds in numb skin includes recognizing the cause of an injury and then avoiding and protecting against it in future. It also includes knowing and mapping the sites of numbness and identifying risks such as pressure points and activities or inactivities tending to cause excess pressure, burns or pricks.

**Impaired blood supply.** This is often a consequence of age associated arteriosclerosis. Feeling for foot pulses is an essential skill. Every fully equipped health centre claiming to be able to manage impaired blood supply should have the laser Doppler equipment to measure foot blood pressure. Basic preventative care should always advocate “Stop smoking!! “Keep walking!”

**Preserving Skin health around foci of disease**

**Warning!** In a diabetic clinic, the ulcer will be the focus of attention. It needs all the oxygen it can get from an effective blood supply. It may be noted that the surrounding skin is scaly and red. Often this scaliness will extend up the leg and the skin will therefore be in repair mode using oxygen and thus stealing oxygen from where it is most needed for ulcer healing in a probably arteriosclerotic limb. By simply washing and generously applying emollients this repair mode and demand for oxygen can be switched off.
Action! Skin care by self help at low cost should be applied to all skin that is not in perfect health. It will help the healing process of more severely ailing skin. Preserving the foot and leg focuses on skin and bone. The great epidemic diabetes is an example where skin care must be put in place. “Legs to Stand On” is a term given to an International initiative focused on developing an integrated (across diseases) community-based approach to improving lower limb care to preserve mobility and prevent disability in less resourced environments. The initiative is directed by Mary Jo Geyer, PT, PhD, C.Ped., a faculty member in the Department of Rehabilitation Science and Technology at the University of Pittsburgh (www.legstostandon.org). There are many organisation focused on the foot. It was the venous ulcer and the need for dressings and bandages that stimulated the development of devices for the Wound Care industry and the setting up of wound care tissue viability societies. They linked with the evolving Pressure Ulcer concern and later the problem of the diabetic foot.(See for other examples of interventions for the lower limb, podoconiosis or for relevant reviews The International Journal of Lower Extremity Wounds, Edited by Raj Mani in the UK,) there are also land mine injury organisations to consider. Skin conditions of the foot are numerous, some global such as fungus infections, some tropical such as leprosy or Buruli Ulcer, or complications of jiggers and other parasitic infection. Podiatry skills, toenail cutting and appropriate footwear provision (See oﬄoading below) call for both acquisition of skills but also more partners. Millions of suffering children from land mine injuries, burns or snake bites and , millions of adults from diabetic foot ulcers, together with the recrudescence and late diagnosis of leprosy are examples of the need for programmes of skin care. Unfortunately the profession of Community Dermatology has not been sufficiently recognised as having the capacity and interest to manage these conditions, but their literature is strong and there are significant leaders in the field.

The Global Alliance for the Elimination of Lymphatic Filariasis also mostly concerns the lower limb. In the management of this and other Neglected Tropical Diseases (eg leprosy, Buruli ulcer) many of which are skin conditions affecting the lower limb there is a rich resource of publications and the diseases themselves have organisations supporting their members. Almost every skin disease distributes literature; often especially well written by co-authorship of medical expert and the affected patient viz The Psoriasis Association, Eczema Society, Scleroderma Society, Dystrophic Recessive Epidermolysis Bullosa Society. One of the needs is to distribute or at least facilitate access to such literature. There is an archive in development The Archive of Essential Limb Care with a relevant content.

The archive4limbcare.org is an electronic, open access, searchable, subject-speciﬁc, author self-archiving repository developed to:

- Boost discoverability & visibility of multimedia content (see attached)
- Preserve multimedia content forever
- Organize content to make it easy to find & navigate in a custom interface
- Centralize a variety of important but hard-to-ﬁnd & little published “grey” literature (conference proceedings, manuals, guidelines, etc.)
Eliminate the high cost of publication & distribution

\[ \text{Easily share scholarship with a worldwide audience} \]

The content of the [archive4limbcare.org](http://archive4limbcare.org) is available to Internet users worldwide **free of charge, without subscription costs**.

For the programme of Community Dermatology

**Action!** Will be based on the following.

**Prevention**
Community based.
Provision and conservation of clean water (see section 23 W)[www.skincareforall.org](http://www.skincareforall.org)
Safe Roads, Car maintenance, Highway codes, Pedestrian training, First Aid at road accidents.
Safe Houses including fire prevention and reduced inflammables, stairways with banisters, mats that do not slip, furniture that does not project at leg level. Cooking areas that are safe for children.
Public sanitation.
Immunisation viz against polio
Folic acid in pregnancy against spina bifida
Programmes of Health Promotion , Accident Prevention
Special programmes to manage the vulnerability of the child, youth , agricultural worker and the elderly.
Clearing of land mines, animal traps
Individual hygiene
Washing and oiling,
Nail care
Footwear, selection, fitting and ready to wear.
Arteriosclerosis: stop smoking, keep walking,
Weight watchers.

**Diagnosis**
Congenital; club foot ,spina bifida,
Traumatic ;including animal and snake bites. podoconiosis
Degenerative ;arteriosclerotic, elderly skin tears of shins,. Venous failure,
Metabolic :diabetic
Infective: viral , bacterial ,fungal , parasitic, syphilis
Malignancy: acral melanoma, squamous epithelioma inclusive of edge of scars , kaposis sarcoma.

**Measurement**
Public health measures, tools and instruments for assessment, audit and other surveys of disability ,quality of life and participation
Assessment tools viz tape measure,10G nylon fibre, water displacement
Assessment techniques vis: ankle brachial blood pressure ratio with doppler stethoscope,
sensory testing ,
Pressure ulcer grading
Nutritional status, hydration status.

**Intervention**

Public Health

Identification and training of workforce viz:
- Accredited Social Health Activists (India)
- Clinical Officers, Assistant Medical Officers (Africa), 
- Nurses, Podiatrists, Occupational Therapists, 
- Family Practitioners, Physiotherapists, 
- Tertiary Hospital Teams, career advisors, counsellors, self-care groups, and patient organisations.

Teaching aids, posters, Handbooks, power point presentations, Internet Access.

Telemedicine

Management of Traditional Health Practitioners.

Gardens for Health

Appropriate Audit and Assessment material

Essential Drug and devises listing and provision inclusive of bandages and hosiery

Triage and appropriate referral.

Algorithms

- Splinting and bracing
- Crutches and Canes
- Wheel Chairs and cushions
- Walkers
- 9 inch thickness rubber mattresses
- Wound Care
- Lymphoedema management

**Warning!** It is bad for the skin to be static, but it should not have prolonged loading. Healthy skin at rest can tolerate low temperature but wound healing has an optimal temperature of 37°C whereas the skin temperature is frequently far below that.

**Action point!** 1) Understanding of body movement. Immobilization is necessary only when there is an acute episode of injury (bleeding) and/or a sudden onset of increased inflammation (recognized by an increase in swelling, pain, redness or local heat). In the neuropathic ulcer these signs will only be recognized by those patients and carers who have been taught to look for them as requiring urgent attention.

The same is so for an acute infection such as cellulitis or an injury such as a snake bite. Rest with elevation localizes the injury and prevents systemic spread of the products of injury. Movement of injured parts as well as full movement of uninjured parts of the body. Most animals do this by licking a wound, gradually increasing its frequency and intensity. As with sports injuries early (perhaps a day later) low amplitude movement and elevation hastens recovery and reduces swelling. After an early resting period, it is helpful to encourage gentleness.
Mobilization of numb skin cannot be guided by the degree of pain and a period of rest. It may have to be followed by gently increasing the range of movement, adding weight baring in a graded programme. As with sports injuries early (perhaps a day later) low amplitude movement and elevation hastens recovery and reduces swelling. After an early resting period, it is helpful to encourage gentle movement of injured parts as well as full movement of uninjured parts of the body. Most animals do this by licking a wound, gradually increasing its frequency and intensity.

Walking is good for the lymphatic and venous system, provided it is not a shuffle and there is ankle movement by raising up on one’s toes. The foot is designed with layers of pressure dispersing fat cells and both elastic and stretch resisting fibres are distributed to strengthen the foot.

( In a deformed foot, or one with diminished blood supply, these are less protective and in persons whose gait is defective the stresses are unevenly distributed) (Gebre and Ryan 2011)

Numb skin needs to be kept supple by washing, drying, oiling and gentle massage.

1) Wash and oil, 2) keep moving (if possible through a full range of all the movements the body is capable of.) The theme that injuries must be prevented, signs of injury looked for and treated early is applicable to the hand as it is to the foot in diabetes and always has been in leprosy management.

A damaged foot should walk less. It needs more protection.

In a hot climate, sweating and fungal infections are less of a problem if holes are made above the sole of the shoe at the instep to aerate when walking.

**Footwear**

**Warning!** Footwear, The skin of the foot needs protection when it is numb as in diabetes or leprosy or when the environment is threatening as in Podoconiosis.

**Action point 1** Managing foot wear. Offloading for ulcers (bed ‘sores’) diabetic or leprosy.

WHO has operational guidelines for Leprosy control which state.

“Most people do not require specially made footwear as the right shoes found in the market can be just as effective. Sports shoes or running shoes are very appropriate; alternatively, sandals or shoes with a firm under-sole and a soft sole may be used.”

Shoes should be neither loose nor tight. Persons with neuropathy cannot sense tightness. When removed to visit places of worship beware of burning from sun exposed floors. One of the roles of the patient and carer is to study the most effective footwear and aids to
improve the gait. Pressure relief of the site of incipient or actual ulceration requires a knowledgeable team that includes the shoe maker the patient and the carer. Trainers and canvas shoes are available cheaply in most towns world wide. They are often suitable footwear.

Footwear workshops are currently created by several different organisations each focussed on a different disease. Viz leprosy, lymphatic Filariasis, diabetes mellitus, Podoconiosis.

Where they are financed and require enthusiastic management from charitable NGOs it is often best to focus on one disease supported by a society set up by sufferers of that disease and their families. Some workshops produce very bad footwear and from a Government point of view, if they are paying, centralisation and a single resource is more efficient. In Ethiopia the one million affected sufferers from Podoconiosis

Benefit from effective workshops but some dispute exists between funding organisations, In Ethiopia there has been a long established centre for Leprosy and an excellent workshop for that disease, Ethiopia’s long distance runners publicize the advantages of being bare foot. Time Magazine march 8th 2010 published an article ” Toe Huggers, Joggers spend a lot on cushiony sneakers, but going barefoot (or close to it) might be better for your body.” Careful measurement is required and fitting of shoes must be followed up by several reviews of the effectiveness of the fit, This is rarely done except by the rare best of leprosy or diabetes clinics. mjgeyer@pitt.edu .www.legstostandon.org

Further Reading

SEE: International Journal of Lower Extremity Wounds  Http://sagepub.com
ISSN: 1534-7346

Partners are to be found in the fields of Wound Healing, Podiatry, Orthotics, Prosthetics, Pedorthics, Rehabilitation, Orthopaedics, Plastic Surgery, In Neglected Tropical Disease and in the field of Leprosy or Diabetes. Mary Jo Geyer is the Director, Legs to Stand On Program Academic Coordinator of Clinical Education

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University of Pittsburgh, Pittsburgh, PA 1526425 Penn Avenue, Bakery Square, S-40106


13) Mobile and migrating populations;

KEYPOINTS:
According to WHO in the year 2000 there were 750 million migrants. An ever increasing problem with existing language, social and cultural barriers to care.

Primary care is free in most countries but secondary care is mostly not free unless ordinarily resident.

Those with skills are a brain drain from their country of origin and from Sub Sarahan Africa a regrettable loss. 37% of UK doctors and 13% of its nurses are foreign born.

Relevance to Skin Care

Mobile populations are more likely to have difficulty in controlling their skin disease. Strife affects many African Nations and many countries are host to internally displaced persons. Studies in Africa carried out by students of the Regional Dermatology Training Centre. Moshi, Tanzania, have reported the following:

Chankara Michael, in 2005, examined the high rate of anal candidiasis (37.9%) in 385 under fives residing in the internally displaced camp in Gulu District of Uganda bordering Sudan. Malnourishment was a determinant in 53.7%. He recorded that 37% of the health Facilities did not have the drugs to treat the condition and consequently care takers usually visited local THPs. Complex cultural beliefs led to stigmatisation of these infants and difficulties with sharing in the camp environment.

Nomadic people such as the Massai tend to have close contact with animals. According to Eliza S Mshihiri, in 2003, when examining 300 Massai, they were living in small overcrowded temporary houses and sleeping on cow hides, and the prevalence of tinea corporis was 35%. She noted the effectiveness of cow’s urine for washing the body and clothes and this needs further investigation.

Isaac Nkuyu Bal uh ya in 2008 chose to examine migrating traditional dancing groups. They moved every two to three weeks and frequently changed sexual partners. Often located in remote areas, they had no access to condoms. He studied them when in Mwanza Tanzania. Of 120 91 were male 29 female. 20 had STI. There were no STI in 12 who had no sexual partners.

Nomadic indigenous people whether in Australia, China, Africa or tribes in India are some of the poorest peoples. They often have lost special survival skills. These can be relearned especially if taught to women members and their practice is protected from strife that is mostly male led. It may be necessary to focus on managing the anxiety of the women before introducing projects such as ‘Gardens for Health’. See N-nutrition
Warning! Those without skills are largely unwelcome. Often they did not have skin disease on leaving their country but acquired conditions such as scabies or fungus infections from poor housing conditions and overcrowding during migration. The migrant often is poorly adapted to food that is foreign and malnourishment is common.

Governments, including that of the UK, may breach codes that promise access to free primary care. (Pool et al 2009, Delamothe T 2012) HIV is not treated free in the UK however destitute, until urgent and immediately necessary. Delmorthe (2012) points out that although primary care is free General Practitioners can and do close their lists.

Action! No one can be lawfully prevented from receiving Primary Health Care Services. In most countries the laws support the right to emergency care. Guidelines to management, assessment of cultural differences, cultural competence, identification of torture, dealing with immigration control have been published in The International Journal of Dermatology (See Fuller et al 2012,)

Leadership has been provided from the NIHMP in Rome see “Capacity to Benefit” CD of the international Society of Dermatology www.skincareforall.org Morrone et al 2011 and in ‘press’ the report on a 2011 workshop in Rome.

The Geneva based International Organisation for Migration (IOM) is joined in 2000 with the Hungarian Pecs University’s Medical School and The Canadian Government to organise a one year course in migration Medicine. www.pote.hu. It was for medical administrators, for people in transition as well as for populations of recipient countries.

The most helpful skill for managing migrants is to be able to communicate. Before attending to their needs seek someone who speaks their language and get a full history.

Do not prescribe therapy they cannot afford.

Bodeker and Neumann (2012) in a study of Refugee Health Services at the Thai – Burma Border observed that traditional Health Practitioners adapted their practices to meet refugee needs.

If assessing skin conditions due to torture be sure to record using photography. Any assumption that a patient is lying is not compatible with good medical care.

Warning! “Migration from rural to urban areas and the accompanying increasing sedentary lifestyles, transition from a Mediterranean to a Western diet, and control of infectious diseases and consequent longer life expectancy especially in urban areas, have all contributed to the rising prevalence of hypertension and diabetes in Iran” (Farzadfar 2012)

Skills Drain
The skills drain from the resource poor English speaking countries to rich countries must be monitored. Countries included among those proscribed for NHS recruitment continue to receive work permits in their thousands per year. For the Phillipines, Nursing is a Government supported industry and export. Where salaries are low and children are to be educated one can hardly blame those who migrate. Emmanuuel Makas from Lusaka Zambia wrote in a 2005 letter to the British Medical Journal, that the experience he got in Africa is far richer than that in the UK or USA and as a consequence he is now competent in surgery. Colleagues migrating have great difficulties getting suitable jobs, are subject to racism, deprived of family support and the sun. At home he can build a house and own a plot on which to grow food on a low salary. He thrives on serving his community and on their gratitude. The living conditions and rewards in many parts of Africa are worse than those experienced by Emmanuuel Makas, but he illustrates a view that the skills drain is not always to the benefit of those migrating.

Further Reading:


Delamothe T (2012) Migrant health care: public health versus politics: what can doctors do about the sorry state of migrants’ access to UK Healthcare?


The Lancet (2009) Inadequate health care for migrants in the USA, 373:1053


www.refugeecouncil.org.uk/policy/position/2006/healthcare.htm

14) Nursing.

KEYPOINTS:
The nurse is above all a carer of the skin giving it more time than a dermatologist who disproportionately gives most time to diagnosis.

The International Skin care Nursing Group(ISNG) is an entry point for Community Dermatology( Ersser et al 2011)

Relevance to Skin Care

Nursing is the largest profession of all health services. It is predominantly female. Much of their time is spent on care of the skin but this fact is hardly recognised by their leaders who arrange their curriculum.

Warning! There is a trend for Nursing Administrators to undervalue skin care training and experience and several studies show that the Nursing Cadre in spite of being the most in touch with the skin, has a low level of knowledge.

Action! In Primary Health the nurse may be trained to a high level and become responsible for the carrying out of Triage to ensure that patients are seen in a timely manner by appropriately trained healthcare professionals in an appropriate setting. Thus in the Hospital for Tropical Diseases in Manaus ,Brazil a nurse will direct arriving patients to a Malaria centre, a Dermatology outpatients centre or a leprosy clinic as appropriate.

The International Skin Care Nursing Group allied to the International Council of Nurses is making some headway in bringing about a change in this respect for Allied Health professionals , Supplementary Health Workers ,Assistant social health employees (Asha);

The role and nature of nursing interventions in caring for the skin from birth to death is discussed by Errser et al (2011) Vineet Kaur (2012 ) writes of Dermatology Nursing in India: the journey so far .In the editorial she describes how nurses in India had almost no knowledge of Skin care and the success of a plan to develop the Dermatology Nurse skin caring skills.

"It is time to put aside professional interests cloaked in the rhetoric of patient safety and for nurses and physicians to grasp the opportunity to work together towards a common goal: the provision of high quality primary care that is accessible and safe for populations world wide.” Lancet 2012

Many of the simple low cost principles of caring for the skin such as washing and oiling (see23) are carried out by the patient with the supervision of the nurse. The basic elements of skin care in primary health services will be collated in this section

Itch is a major symptom of skin disease and in a randomised controlled study in Holland nurses were to shown manage itch cost effectively.( Van Os-Medendorp et al 2008)
Relevant Reading


www.skincareforall.org

Kaur V(2007) There is a role for the Dermatology Nurse in Asia. Community Dermatology Journal. 4:13


Nightingale F (1860) Notes on Nursing. What it is and What it is not. Harrison ,59 Pall Mall London


15) Obesity, diabetes and other forms of malnutrition.

KEYPOINTS:
The greatest epidemic of all is obesity. It is strongly linked to poverty.

Relevance to Skin Care.

Obesity predisposes to diabetes and diabetes underlies several skin conditions. The prevalence of skin conditions and especially skin infections is high. In the obese diabetic acanthosis nigricans is common (Boza et al 2012). Diabetes often makes the treatment of other systemic conditions such as tuberculosis much more difficult: Whether a skin infection or a wound, damage to the skin of the obese is both more likely and repair is less effective. In the five years between 2003 and 2008 Diabetes has become a top priority for urgent intervention by all carers of the skin. Medicine has lost the war against Diabetes and Obesity (Dang and Boulton 2003). Hosseini et al 2008 in a study of skin lesions in 1135 patients with Type 2 diabetic found 8% of such lesions preceded its onset, but that 100% of diabetics have skin failure and in 70% it is manifest by skin lesions. Behm et al 2012 also emphasise a raised pH and defects in the stratum corneum. These might justify washing with acid sops and the use of emollients to improve the health of the skin.

Malnutrition due to starvation affects all functions of the skin.

Warning! Obesity has become the largest epidemic of all! Either with or without the complication of diabetes the skin of the obese needs attention to counteract its heightened vulnerability.

Attention must be given to problems arising in the care of the overweight affecting the carer such as back injuries from lifting or sitting on broken toilet seats.

Action! Carers of the skin can alert populations to the link between obesity and diabetes as well as to making an early diagnosis. Care of the skin can alert to neuropathy and its management to circumvent foot ulceration. Care should prevent and certainly delay amputation. It will do this by developing an effective educational system that includes foot care regardless of specific disease entry point. All who care for the skin should be able to examine the skin of the foot whether in the context of leprosy, diabetes, elephantiasis and many other foot disorders.

Exercise during uncomplicated pregnancy. Key words are eat for one exercise for two!

Many do not recognise being overweight. Malaysia School reports include the child’s weight as a reminder to parents.

Partners are various but regional branches of the International Diabetes Federation have a strong educational role.
Action! Gardens for Health

A workshop held at the Regional Dermatology Training Centre, Moshi, in Tanzania January 2012 focused on the nutritional requirements of the skin to prevent failure of its functions. Functions such as trans epidermal water loss, skin hydration, sensitivity to environmental threats, and cornocyte health can be measured. Gardens grown for health are recommended. In the contribution from Rwanda the focus is on linking an agricultural worker and a demonstration garden with a health centre and then providing from that resource help with home gardening. In the contribution from India, the focus is more on tribal knowledge, developing forest gardens, and support for valuing and restoring the earth. There is a successful entry into the science programmes of schools. See Nutrition and Gardens for Health 2012 www.isd.org Yanya Orr and Brad Snyder (in preparation) for International Journal of Dermatology See also www.earthtrustnilgiris.org and www.friendsofhope.org.uk

2 billion people are iron deficient, 255 million children are Vit A deficient, 1.6 billion are iodine deficient. Promote breast feeding, clean water, and sanitation. One aim is to stop 1.6 billion people starving and 1.6 billion being overweight.

Relevant Reading


Duckitt K (2011) Exercise during pregnancy, Eat for one exercise for two BMJ 2011;343:d5710


16) **Paediatric Skin care:School Health:**

**KEYPOINTS:**

*The greater number of children in the developing and transitional world and their greater predisposition to skin infections is a dominant feature of public health significance.*

*The skin is immature. It is growing and demands nutrition that is often unavailable.*

*Children with disability must be given the opportunity to learn and to play as much as healthy children.*

**Relevance to Skin Care**

Skin Conditions are among the most prevalent problems and the world’s population is overwhelmingly below the age of 10. Development incorporating both play and education is impaired by the demand for child labour.

**Action!** Entry points for paediatric dermatology, are the common infections scabies, lice, tinea capitis and impetigo. Where there is poverty, climate change or strife there will be a need for recognition and management of malnutrition. Today it also includes early management of obesity the largest contemporary epidemic. The prevalence of atopic eczema is rising and affects about a sixth of the world’s children. The causation and management is complex. It is reviewed by McAleer MA et al 2012

**Warning!** The importance of play and education is often in the developing world over ruled by putting the child to work.

One should not underestimate the capacity of older children to play significant roles at home and at school. See *Child to Child Trust’s* web site. Caring for chickens and younger children should begin after age 5-8 years, fetching water looking after cattle or goats, and some agricultural work in the fields from 8-10. Wage earning is appropriate from age 12.

Children are reluctant uptakers of biomedicine. They are distressed by inoculations and by dressing changes of wounds. They may not cooperate with biopsies. Inamadar in the “Capacity to Benefit “CD 2011 Int Soc Derm [www.skincareforall.org](http://www.skincareforall.org) describes “The value of diagnosis in the clinic or by telemedicine.” by the easy examination of a sample of hair by an expert in genotrichology, as an entry point for the early recognition of Genetic disease with systemic complications in young children.
Many Patient Organisations based on disease, such as DEBRA for epidermolysis bullosa, Psoriasis, Eczema, scleroderma, ichthyosis, produce lucid leaflets as guidelines for the care of children.

Children can also have a role in managing sibling disease. There is a recent publication by a twelve year old on surviving cancer over an eight year period which describes his concern about care of his and other grieving parents. Daily Telegraph 20\textsuperscript{th} January 2012

Since 1979 Child-to-Child has existed as an international network promoting children’s participation in health and development. The Child-to-Child Trust (www.childtochild.org) was formally established in 1987 and is based at the University of London’s Institute of Education. Over the past 30 years Child-to-Child is known to have spread to over 70 countries worldwide and has impacted over a million children annually.

In order to achieve their mission they promote child-centred, active learning approaches that engage children on health and development issues. Children then disseminate their learning to other children, their families and their wider communities through participatory research activities. The older child provides a hat to shield the baby from the sun and stops the younger child from getting too near the fire or water pool.

To be an advocate for these approaches the Trust produces publications and teaching aids and provides training courses and consultancies. They work through both local partners in-country as well as through large international organisations such as UNICEF and UNESCO.

**Patient Centred Care:** Its principles, self help interventions and integration with Community/Public Health initiatives must recognize the child’s requirements in the context of growth of body, intellect and social skills, for parenting, play and education. They have roles to play determining safety issues in a younger child. Keeping away from harm and making use of available protection

The skin of the disabled child is vulnerable; it has many added reasons to fail: most of which can be remedied by basic care. This is patient centred but care must be provided by parents and community with whom time must be spent. Publications by C Dunst over a five year period from 1985, are a helpful resource. The difference between caring for an infant rather than an adult, includes, short but frequent, absence of distraction, clear and simple instruction, reinforcement by approval, opportunity for imitation, waiting long enough for a response. The severely malnourished child needs replenishment of water and food but careful monitoring is necessary when giving intravenous fluids to avoid heart failure.

Prevailing attitudes to gender often are to the disadvantage of the female child. Access to help may be ignored if the child shows no progress. Very often getting long distances is expensive and takes too much time. It is an unwelcome cost. Much of the skin carer’s time may be taken up seeking support from the community. This may be family centred rather than patient centred.
In the developing world care of a disabled child is a burden, especially because of ignorance. Ignorance of basic care will not exist in a climate of Skin Care for All.

There is a useful Quality of Life literature that describes both children and families affected by skin disease.

Helping children to sustain their love of nature, and find creative solutions is the role of the organisations working in the Southern Hills of India, www.earthtrustnilgiris.org and www.friendsofhope.org.uk.

**Further Reading**


Child to Child Newsletter from Child to Child Trust, Institute of Education, 20 Bedford Way, London WC 1 HOAL:-

Http://www.childtochild.org

Http://nwww.healthnet.org/essential-links (a South African resource for perinatal and child health.)

WHO’s Global School Health Initiative :- [http://www.who.int/hpr/gshi](http://www.who.int/hpr/gshi)
17) Quality of Life.

KEYPOINTS:

The Burden of a failing skin was not fully measured and completely understood until its influence on Quality of Life was assessed. “With measurement methods now available it is possible to quantify the huge impact of skin disease and so provide powerful new arguments for an appropriate share of healthcare funding for services and research. It is possible to prove and compare the improvement from different management strategies and identify the most cost effective ways to intervene to improve quality of life of people with skin disease.” Finlay (2011)

Relevance to Skin Care:

The Development and interpretation of Quality of Life questionnaires led by Andrew Finlay and collaborators worldwide has been one of the greatest contributions of dermatology to contemporary medical practice. Attention to the health status of individuals, partners, families, or communities and changes occurring as a consequence of interventions and measurement together with revised definitions have benefited from dermatology input assessing Quality of Life. The author’s (T J Ryan) experience began simplistically with a discussion on the use of the term “adversive” which was creeping into the handicap literature after the polio and the thalidomide disasters and with an essay on being confident when nude. Later he developed this as a Questionaire (Ryan 1987). Discussion of disability measurements of wheel chair children led to the term adversive disability describing being unwelcome because of appearance or odour. Quality of life measurement followed, and later measurement of participation was added in a revised classification by WHO.

Morbidity is underestimated as a contributor to impaired Quality of Life which ultimately leads to increased mortality if only because of reduced availability of resources. Understanding Capacity to Adapt and Self Management results from interventions that enquire in depth into Quality of Life. (Huber et al (2011) There is overlap with most of the other programmes.

Quality of life influences happiness. See Section(2)B- Body Image. Happiness in the UK is at its highest level in teenage and in the 7th and 8th decade and reduced in the 4th and 5th decade. Anxiety when measured, is low in youth and falls in late years. Both show differences by ethnic group, marital status and employment status. Being out of work makes people unhappier and more anxious. www.ons.gov.uk/ons/index.html?cardsp=2#id2
• As has been shown in a study of vitiligo two people with the same degree of
disfigurement may have different quality of life scores because they have different
degrees of anxiety and depression or they have different self esteem scores. Persons
who are more anxious in their daily life and who had a poor self esteem will perceive
their disfigurement as more severe. Stigmatization experience will also be an
influence upon QoL. In studies of stigma, four themes consistently emerge

• 1) Family rejection and the break up of family relationships such as banning from a
family wedding.,

• 2) Shame and disgrace (and even abuse) attached to something regarded as socially
unacceptable.

• 3) Dependency, safety and refuge found at a charitable home. For example ‘this
organisation treats me with respect and affection and takes care of my wants.’

• 4) Shared spiritual beliefs (including preparing for a better journey after life.) are
associated with seeking social support and improved mental health.

The number of QoL instruments increases yearly and each disease stimulates its
own measurement. The best known are Skindex-29 which has 29 questions and is
self administered, DLQI is 10 questions only and is also self administered. The Sf-36
is grouped into a physical and a mental health component and its 36 questions are
self administered.

Action Point! Strategies for improving quality of life in people with skin disease.
(Finlay2011)
The “Six Star Strategy” for improving quality of life in people with skin disease is based on:
*1. The clinician being informed.
*2. Targeting the most affected patients.
*3. Evidence based therapy, including QoL evidence, being available.
*4. Enhancing adherence to therapy.
*5. Providing appropriate support to patient and to “the Greater Patient” i.e. the partner
and other family members.
*6. Monitoring of QoL to demonstrate success or failure of intervention.

Further Reading
Finlay AY(2011) Quality of Life CD capacity to benefit. WWW.skincareforall.org


www.ichesworldcare.com

18) **Repair and Regeneration.**

**KEY POINTS:**

*Beginning with leg and pressure ulcers this topic became tissue viability and wound healing. In Europe the society and journal covering this topic was named Regeneration and Repair. Dermatology departments played a leading role in initiating these programmes.*

**Relevance to Skin Care:**

Repair and regeneration cover wound healing, burns and lymphoedema as well as terms such as Tissue Viability. Journals devoted to these terms are abundant. Many organisations were developed by Dermatologists in Wound healing as sub departments in Dermatology eg: Ryan and Lapiere, Westerhoff, Romanelli in Europe and Eaglestein and Lazarus in America. and management has had a strong nursing input through Tissue Viability organisations.. The Devices industries developed new dressings and much other equipment, such as cushions, beds, chairs and many other offloading devices. The advances in stem cell research clear the way for regeneration. There are still some essential guidelines for wounds and for limb swelling.

There are numerous partners: many of them grew out of Dermatology Departments recognise the need for better management of non-healing wounds and the burden of lymphoedema. Others developed from Plastic Surgery and can be read in *Plastic and Reconstructive Surgery.*

It was the need for additional advice on wound Healing in the Management of Buruli Ulcer that lead Kingsley Asiedu, of Neglected Tropical Diseases at WHO, to invite such expertise to write *Wound and Lymphoedema Management* edited by John Macdonald and Mary Jo Geyer (WHO/HTM/NTD/GBUI/2010.1) It lists five essential interventions for wounds and three for lymphoedema.

**Action Point!** *When all else is difficult, do at least the following!*

**Wound Care:**

1) Treat Systemic Illness eg: anaemia, diabetes, and malignancy.

2) Protect the wound from trauma, cover and offload.

3) Promote a clean wound bed and reduce infection of the wound base.
4) Maintain a moist environment.

5) Control oedema.

**Lymphoedema care:**

1) Increase Lymph flow: eg by body movements including breathing

2) Reduce overload from a failing venous system; eg by elevation and ankle movement

3) Reduce overload by managing Inflammation due to infection or irritants.

**Care of Arterial Disease of lower limb:**

Stop Smoking

Keep Walking.

**Further Reading**

Krasner DL, Rodeheaver GT, Sibbald RG and Woo KY. (2012) Chronic Wound Care ,5, A Clinical Source Book for Healthcare Professionals. 5th ed, HMP Communications ,Malvern PA


Stavroulaki A and Pramantiotis (2011) Cellulite ,smoking and angiotensin-converting enzyme(ACE) insertion/deletion polymorphism 25 1116-7


19) Supplies: items used in skin care such as drugs dressings and tools.

**KEYFACTS:**

*40% of health equipment in the developing world is out of service.*

*Provide equipment only if it is easily maintained and has affordable delivery costs.* ([http://bit.lyRhxk2L](http://bit.lyRhxk2L)) *Too often donated goods are unusable.*

*Fortunately, most skin diseases can be treated with cheap and simple preparations. Empty shelves in a Health Centre are unacceptable. At the very least calamine lotion, a scabicide, gentian violet, emulsifying ointment, hydrocortisone or tar paste should be available.*

*The evil of fake drugs is worse than HIV/AIDS and Malaria put together.* *(see, Dora Nkem, Akunyili, Nigeria)*

**Relevance to Skin Care**

*Items used in the care of the skin viz: Essential Drugs and dressings.* There is a huge range of variables to be considered when describing the equipping of an ideal health centre so determine its capacity to manage the many problems which attend relating to the skin. The commonest in the tropics are infections such as impetigo, superficial mycoses, scabies, insect bites, eczema, burns, wounds and with geographical variation, tropical skin infections. Most Governments provide an essential drug and devise list which will satisfy only if in its preparation it had experienced advisers with knowledge about the skin.

For basic needs, skin carers need to see and there is often not enough light if shade and privacy prevail. From the writings of Florence Nightingale to current WHO texts on setting up Health Clinics there is no shortage of good advice. See Further Reading and H-Housing.

Most delivery of care is now managed. A feature of managing is controlled purchase. Governance favours collecting a few preferably low cost remedies for purchase. This is usually based on good advice from experts and sometimes the user’s voice is heard. Too often supplies serve the wealthy and by pass the poor.

Adverse Drug Reactions are a major cause of skin failure. Whether purchaser or prescriber of an adverse reaction the skin carer plays a central role in management. Local and National variation determines that entry points to give or receive advice are not always well sign
posted. Fashions, such as blood letting, come and go. Fashion is strong in advocacy and contributes to placebo effectiveness. High Tech advances are mostly at high cost. They are single causes often more concentrated and powerful compared to long traditional complexes found in traditional medicine which are mostly safer and low cost. They are mixed agents and complex like a good wine. We can all recognise a good wine but all of us can suffer if given an active principal alone such as ethyl alcohol.

**Aids for teaching:** Teaching aids are needed, everything must be fit for purpose, serviceable and satisfying.

A collation of available teaching aids for skin care is needed (with Web sites) of which there are many, from Dermatology, Wound Care, the Lymphoedema Framework, Burns and from each of the Neglected Tropical Diseases. These are *Evidence Based* and where appropriate have added emotional impact. Algorithms have so far been prepared from groups in Mali, Rome, Mexico and from the Nursing Profession. (Mahé et al 2005)

“Where there is no doctor: a village health care handbook” by David Warner and similar Child focused books by the late David Morley of the Institute of Child Health are other models for a guideline. There are numerous books, with a strong dermatology and nursing in put relating to skin care, for wound healing, burns and from the International Lymphoedema Framework (ILF). Leprosy, Onchocerciasis, Leishmaniasis and Lymphatic Filariasis, and other Neglected Tropical Diseases affecting the skin. David Morley set up TALC (Teaching Aids at Low Cost) which includes advice from Dermatology (especially from Barbara Leppard) and distributes the *Community Dermatology Journal* ed by Paul Buxton and Christopher Lovell. Now distributed from the IFD. www.ifd.org.

Partners for the project can be already found up and running for all of these. viz: International Foundation for Dermatology (IFD), International Skin Care Nursing Group (ISNG), World Alliance for Wounds and Lymphoedema Care (WAWLC), International Federation of Leprosy (ILEP) International Lymphoedema Framework (ILF). Global Alliance for the Elimination of Lymphatic Filariasis (GAELF). Many more can be elicited but these are the ones regularly making reference to dermatology in the developing world.

Multi-language, leading textbooks, posters, guidelines, patient society leaflets, journals, websites, Cochrane, systematic reviews, other systems of medicine. The acceptability of many utilities is affected by cultural differences. In some countries white bed nets have been replaced by green because white is like a funeral shroud. In Tanzania, hats for those affected by albinism were first khaki and then blue. The change was due to the military appearance of Khaki and the United Nations appearance of blue.

The distribution of supplies can be hastened by the mobile phone. UNICEF in Uganda encourages health workers to prepare estimates of supply requirements as text messages to the district office.
Further Reading

The University of Pittsburgh library System has an E-Archive on Community Based POD in the Developing World.(see12)


Nightingale F (1860) Notes on Nursing. What it is and What it is not. Harrison ,59 Pall Mall London

Bakker P van Doorne H, Gooskens V, Wieringa N (Date not provided) Dermatological Preparations for the tropics ; A formulary of dermatological preperations and backgrounds of choices ,production and dispensing. CIP Gegevens Koninklijke Bibliothek ,Den Haag

ISBN 90 367 0225 9

Health Technology Management in Developing Countries is the focus of

[Http://infratechonline.net/?page_id=3](http://infratechonline.net/?page_id=3)


The WHO model Prescribing Information on Drugs used in parasitic diseases 1995

The WHO model Prescribing Information on Drugs used in Skin Diseases(1997) “ The aim is to provide the basic information necessary to treat skin diseases in the community ,with particular emphasis on those diseases prevalent in developing countries.”ISBN 92 4 1401060

The WHO model Prescribing Information on Drugs used in sexually transmitted diseases1995

The WHO model Prescribing Information on Drugs used in mycobacterial diseases 1991

WHO ,Wound and Lymphoedema Management 2010

(20) Traditional Health Practice (THP):

KEYPOINTS:

Understanding Traditional Medicine is necessary because it is what people mostly use. It is often helpful not just for the management of disease but when the client has social and spiritual needs.

Relevance to Skin Care

There are many more traditional Health Practitioners than Biomedical Practitioners and such availability is desirable in any health service. However the many good programmes available from biomedicine work best when there is early diagnosis and the first use of THPS is a disadvantage leading to delay and to non attendance of health programmes of the best of public health. For leprosy for example early diagnosis is essential to prevent disability.

The concerns about Traditional Health Practice include

1) how to collaborate with this predominant health service?

2) How to approach the finding of evidence?

3) How to use Traditional Medicine and when not to do so?

4) Herbal Medicine and its identification, preparation, dosage, use as a topical: Including written regimens such as Chinese or Indian Systems of Medicine.

When considering Complimentary and Alternative Medicine (CAM), it must be important for public health that 80% of the worlds populations use it. Often it is taken with biomedicine and such supplements are known sometimes to interact deleteriously. Ridicule from biomedicine makes the CAM user secretive about such intake.

Energy based systems such as acupuncture, spiritual healing, homeopathy and herbals are also widely used in the developed world where they are known as Complimentary and Alternative, Where they are combined with biomedicine it is known as integrated medicine. Using scientific methods of analysis and top grades of evidence based medicine these systems frequently fail. Consequently there is a strong lobby from scientists to prevent their use. As Lesley Rees Director of Education for the Royal College of Physicians wrote for a
special issue of the British Medical Journal in January 2001. All of which is relevant reading. “Integrated Medicine is about restoring core values which have been eroded by social and economic forces. Integrated Medicine is good medicine” (Rees 2001)

(see also BMJ 2012;345:e5423) "Traditional Chinese medicine often gets a bad press, but proponents say it represents an untapped pharmacopoeia, and are using cutting edge biotechnology to prove it. (Bulletin of the World Health Organisation 2012;90:562-3,doi:10.2471/BLT.12.020912). Of about 100,000 existing formulas that go back 2000 years, artemisinin is one such gem, now used to treat malaria. In 2011, The Chinese government invested $1bn (£0.64bn) in research into traditional medicines, tripling the amount spent in 2010, while another $1bn went into building new traditional medicine hospitals."


An example of the dilemma of the use of THPs is the management of snake bite.

There is unquestionable value in giving antivenom to persons bitten by the few species of snake that threaten life or cause necrosis of tissue. Anti venoms are specific and must be given early. This requires identification of the snake, and rapid access to the antivenom. Most people bitten by snakes are terrified and far distant from the resource of antivenom. Often bitten in the dark they do not identify the snake. Until recently all systems of medicine used tourniquets and scarification. It is now known that the best first aid is immobilization to prevent lymphatic spread of venom. A bumpy long distance ride does not immobilise. The ideal would be immediate access to a health provider who immobilises , identifies the snake , forwards the picture of the snake to an antivenom centre by mobile phone. Strongly reassures the patient and neither uses the tourniquet nor scarifies.

The long term aim must be to train all THPS in best practice.

Traditional Medicine in Africa is an Oral Tradition passed down from one generation to another. Chinese and Indian systems of Medicine are several thousand year old written traditions.

WARNING! Willcox et al (2012) have surveyed more than 90 African researchers to assess the Clinical Research on Herbal Medicines in Africa. There are major deficiencies due to poor funding, difficulty in recruiting patients and poor rapport with Traditional Health Practitioners. Biomedical support is weak and cultivation and production of herbs lacks quality control. More work needs to be done on Property Rights issues and good clinical practice guidelines.
**Action!** Integrating the best of all Systems of Medicine of proven value is described in several publications by Narahari and Ryan concerning the morbidity control of lymphoedema secondary to filariasis.

**Yoga** has proved essential in a successful project for the control of Lymphoedema in S India lead by Narahari (see “Capacity Benefit” CD of the Int Soc Derm, www.skincareforall.org). There have been many publications focusing on *Hatha Yoga* stressing the importance of physical exercises and positions and breathing-control in promoting physical and mental well being and the importance of demonstrating its control of the autonomic system. There is plenty of evidence that a straight back, and correcting any tilt of the pelvis, thrusting forwards its brim and indenting pelvic blood vessels, is a benefit for the venous and lymphatic system of the legs. There is also evidence that raising intrathoracic pressure by prolonged expiratory breathing, (Chinese Dragon Breathing, Chanting) empties the great veins and assists lymphatic flow. By breathing through one side of the nose only it can be lateralised to affect the Vagal nerve or sympathetic nervous system.

Its value as a system of movement of the skin and stimulus to lymphatic drainage is enhanced by other aspects of Indian Systems of Medicine, such as the herbal washes of Ayurveda.

**Warning!** Chemical based biomedicine can be too costly for Community Dermatology and is prone to adverse reactions.

A study in Ghana (Aikins 2005) revealed that while most people with diabetes recognised the superior benefits of Biomedicine they very frequently relied on Traditional Medicine and sometimes gave up seeking treatment, on account of the costs of therapy. Insulin expenditure was 60% of monthly income on minimum wage. Because Witchcraft and sorcery were often blamed for the condition spiritual action either from the traditional healer or from the Christian Church were sought.

Complementary and Alternative Medicine is patient led and cannot be ignored. A characteristic of CAM is its greater intervention using energy based systems such as acupuncture, Reiki and other systems imported from Asia.

The accurate Identification and home growing of herbal systems of medicine, with enhancement of the good effects of herbal remedies and the control of their abuse or ineffectiveness as well as sometimes harmful affects, is a feature of practitioners who have had sufficient training, eg 7-8 years for Ayurvedic practice. It differs from Biomedicine in the encouragement of synergism, in frequent changes in dosage and in mixtures, together with a planned intervention based not so much on physical signs but on the make up of the constitution when healthy.
Many carers of the skin have used topical therapies such as for example Aroma therapy. Trained skin carers recognise not only that it helps some patients but they should be aware and understand contact dermatitis as an adverse reaction to plant constituents applied topically.

In a series Theory and Practice in Medical Anthropology and International Health Mark and Mimi Nugent write of their experience in South Kanartaka, India, from about 1970 to 90. Much of the following is adapted from their publication.

The rural semi–illiterate villages were already exposed to a huge rapidly expanding choice of medicaments from both biomedicine and Indian Systems of Medicine. The lay persons knowledge about any of these is very limited and in writing about Integrated Medicine saying that it is culturally acceptable I may have been wrong in suggesting that the fact they are familiar with it means they are knowledgeable.

Those who are familiar with the medicines available may view Biomedicine as more powerful, acceptable only when the constitution is strong enough to withstand it. Ayurveda may be viewed as safe, as capable of control, restoration and balance. Nugent and Nugent (p211) quote an Ayurvedic practitioner, who explained that spectacles and crutches instantly relieved problems but do not improve the eyes or legs. They may weaken the eyes so one sees even less well after using them. One leans on the crutch and the muscles of the leg atrophy. A patient is described with a painful eruption of the hands who is given steroid creams. When stopping them the condition gets worse. No questions are asked about the contact of her hands in the daily washing of pots and pans with the much later identified Tamarind.

**Warning!** One cannot ignore the long term effects of encouraging a poorly educated population to develop blind faith in the infallibility of modern medicine and the magical properties of prescribed pills. In India, people who are too poor to buy rice are being led to believe they need a cough mixture for every cough, an antibiotic for every sore throat, and a tranquilizer to solve the problems of everyday life.

When the language of medicine before modern drugs entered the picture hardly needed integration because of the universality of certain beliefs incorporating heat and cooling, the importance of balance or the letting out of the bad.

“The ways in which popular ideas about medicine influence health care seeking, medicine compliance, and self-regulation are unappreciated by many in the international health field. (Nugent and Nugent 1996 p226)

Systematic Ayurveda is too expensive, too time consuming and requires lifestyle changes few are prepared to make. This applies mostly to acute medicine. Experience of Ryan and Narahari and his team when managing elephantiasis, is that after years of disablement a
few months of integrated medicine making a difference is more than welcome after
counselling has explained the process.

The Nugents write about Scabies which is an interesting model. It is regarded as over
heating and most biomedicines (including most probably Ivermectin are believed to be
adding heat). Something else must be added for cooling and colourful ointments are less
acceptable than white lotions. Benzyl Benzoate, which stings, may be thought inappropiate
unless prescribed with some medicine to deal with the heat. Dietary advice is an expected
part of the consultation, advice on cooling foods such as milk will be expected. Whereas
“take this pill with plenty of water” adds to the belief that it is overheating.

Persistence of symptoms such as itch surely is to be expected if the treatment is a white
lotion applied only once. I always showed patients in Oxford the mite under the microscope
and explained that when killed by the once application, its body, eggs and faeces, persisted
for many days. Under the microscope, and illustrated in posters the mite is an enormous
beast that surely needs a strong body to resist it!

The language of wound healing and the role of scarification overlap. An oozing process is
allowing escape of badness. White lotions as opposed to yellow ointments help to dry up
oozing conditions. Hot poultries, injecting penicillin and boiling up syringes, before the
disposable era, all add to the idea of heating being in some senses strengthening, the most
powerful agent to rid the bad. Unwashed syringes injecting a powerful medicine may be
thought of as not needing the additional power of heating for sterilization. They are speedy
strong and disruptive. Cooling, calming and Osler’s equanimity are much slower processes

Some private Practitioners are dependent on selling drugs and some of the pharmaceutical
industry, both in a competitive health care system, are happy to support such beliefs. They
use this language to market products more effectively. Restoring balance usually takes much
longer and prescribing a medicine that is also a food protective of the stomach is
recommended. Ayurvedic medicines are not cheaper if it is possible to prescribe their slow
restoring action of several weeks.

Nugent and Nugent write several chapters on resources and reimbursement.

Elsewhere I write about altruism and reward

There are rewards for giving from God or Gods. There is the role of duty, There are
perceived benefits to the donor. All of these can be incorporated into a health service.

These alternative remedies are closer to a self management opportunity than is much of
biomedicine.
The local Traditional Health Practitioner (THP) may influence the belief of the patient as to causation—such as the casting of a spell—but the patient may ultimately find the advice from the THP the most reassuring and hopeful.

**African THPs studied by Dermatology students at the RDTC Tanzania.**

There have been several studies of the role of Traditional Health Practitioners at the RDTC in Tanzania. These are summarised as follows.

Many of the dissertations examined from whence and from whom the population receives its diagnosis and treatment of skin conditions or STIs. Traditional Healers are the first to be contacted by most patients because they are readily available and accessible. Nelisiwe Gibizizwe Nelly Matsenjwa in Mamzini District, Swaziland, in 1994 interviewed herbalists, bone casters and faith healers and found only 46% examined the patients skin condition. 2.8% considered contact a cause of skin diseases 32.6% sexual intercourse and 42.1% witchcraft. Alcohol, hereditary and diet were other causes believed in. The commonest condition treated was genital sores (32.8%) for which enemas were frequently given, but scabies and fungus were each around 25% of cases. Herbs were given orally, per spoon, or by enema and less frequently topically.

Some communities such as the Massai rely almost wholly (92.6%) on Herbal Medicine and this is threatened by deforestation and from being an oral tradition with lack of literacy. Cultural acceptance is due to the belief that herbs are God given and the knowledge is passed from generation to generation and is part of their cultural upbringing. Joseph K Bwogo Kirui, in 2000, examined two communities near a health centre and two far away. 95 persons were interviewed of which 88 used herbal medicine available in their homestead in local bushes and forests. The safety, is assumed rather than proven but the commonest, such as Cassia Didymobotrya for fungal infections or Aloe for wounds and burns have now an evidence base.

Factors influencing choice of THPs are their low cost, acceptance of payment in kind in due course, their local presence often with locally grown medicaments.

The young and secondary school attenders believe ‘modern’ medicine is more scientific, and there is a strong disbelief in THPS by religious leaders. (there is a distinction between Traditional health Practitioners who are mostly herbalists and Witch Doctors who deal with a spirit world, but this is not always recognised by the Church or Mosque.) When the questionnaires were followed up by focused discussion they were found to underestimate the helpful role of Traditional Medicine.

In 1996 in six prevalence surveys of villages from different regions of Tanzania THPs were found to be easy to access and frequently the first to treat STI. Many of the herbal
medicines prescribed are grown within the village and are easy to access. Knowledge is mostly passed down as an oral tradition within families. An evidence base is partly provided in the following much used document.(Khan and Nkunya 1991) It was noted that some reforestation programmes are replanting Herbal Medicines.


These herbal medicines are much used for eczema, papular pruritic eruption and psoriasis especially when health centres are far distant, (Ndamiwe Kaseko Malawi 2010). In 1996 Heldgod N Njau examined 748 persons and 178 heads of household from one rural village with a population 2700 persons in the highlands of Kilimanjaro. Here the prevalence of skin diseases was 44.9% dominated by fungal infections The nearest dispensary was 2kms away and the hospital 6kms away. But they do not stock dermatological drugs and so the chances of being properly treated by such are very low. On the other hand some traditional healers who were visited by preference knew how to treat common skin conditions but not how to prevent them. The heads of households were 84 Moslem and 52 Christian. 68.5% of the Christians and 59.1% of the Moslems would prefer access to ‘modern’ medicine but Njua concluded that the merit of traditional therapeutics cannot be over emphasised because they are easily accessible to the community, manageable and low cost. Dissimilar findings were found by Nakuunda Lukume in a Tanzanian Village in 1996 probably because the dispensary was located in the centre of the village and 97.6% of the heads of household were Roman Catholic. Never the less Lukume believed that a fuller investigation would find that three Traditional Healers located in the village and several Traditional birth attendants were attended.

Lawrence Q Qawoga 1996 found that none of the Meru tribe choose TM but self medication (not visiting any health service) was common in this tribe. A neighbouring tribe the Chagga used the THPs for cost reasons but this study also observed that male heads of household had to give permission if a female THP was to be visited and this impediment led to greater use of the Government dispensary.

Liberator A Barusu from the Rukwa region Tanzania in 1997, interviewed 50 THPs and found 90% treated gonorrhoea, 88% treated syphilis and 66% treated eczema. The medicaments include plant roots, and animal materials. He detected good diagnostic skills but only 4 out of 50 kept records. 36 out of 50 did not observe or admit to adverse reactions. They were mostly willing to refer to both “modern” medicine and to other THPs. A finding also recorded by Matsenjwa in Swaziland in 1994. Treatment of side effects was similar to biomedical practice viz: first to stop the drug, treat diarrhoea with fluids, gastric irritation with milk, and charcoal and some herbals were also prescribed.
**Action Point!**

To reinforce good traditional practices:

a. Promoting codes of good practice for THPs, including those of Action for Natural Medicine (ANAMED) [http://www.anamed.net](http://www.anamed.net), and the African Union of Traditional Healers’ Associations.

b. To support education to share and document knowledge of traditional practices, reviving household knowledge and skills in using plants for the prevention and treatment of disease, focusing on local knowledge and indigenous (rather than exotic) plants.

c. To promote good clinical governance of all health practitioners, for example through supporting the development of responsible, educative, officially recognized professional organizations for self-regulation, as required by the WHO Charter for Traditional Medicine.

d. To record traditional herbal knowledge that is in the public domain, identify herbals effective in skin care but also hazards, photograph the source plants, record preparation of medicines and storage, labelling and dosage systems.

e. Where requested by traditional custodians, provide a safe facility for recording and storing proprietary knowledge (such as restricted access databases).

f. To make an international online tropical pharmacopoeia for the production of medicines for skin diseases.

g. To recommend the use of traditional soaps that are acid and antiseptic, and for which irritancy and allergy are rare.

h. To develop practical guidelines for health practitioners in the use of traditional medicines and other low-cost health technologies, which can be disseminated for example through the seminars and publications of ANAMED. [http://www.anamed.net](http://www.anamed.net)

i. To ensure policies are based on principles of sustainability and equitable benefit-sharing arrangements.

3 To prevent harm:

a. To encourage open discussion of risks of traditional practices relating to the skin, with a view to establishing safe practices and harm reduction. Examples of harmful practices in the field of skin care include scarification with unclean materials and skin lightening creams.

b. To support ongoing efforts to prevent unprofessional and commercially exploitative practices.

4 General policy goals:

a. A strong policy statement that the involvement of competent THPs in the prevention, control, and management of most common skin diseases of public health concern and importance will be beneficial for the implementation of primary dermatological care at ‘grass-roots level’. Competence at that level means proper training and constant coaching and quality assurance through licensing and registration of THPs.

There are many examples of clinics in which THPs and biomedical practitioners consult together.

b. To support efforts at improvement of quality, safety, and efficacy of herbal products.

c. To identify the best systems for teaching THPs.

d. Guidelines must be developed through an understanding of the local culture, which is fully consulted.

e. Encourage women’s groups as custodians of the growth of herbals and best practice.

f. To support interdisciplinary research efforts into the evaluation and conservation of medicinal plant genetic resources.

g. To make alliances for the further development of public health policy.
To provide a background for and to stimulate future research by the disciplines of skin care. In conclusion, the Task Force recommends that the professions responsible for skin care collaborate with THPs and help to educate them, to improve safety, and preserve their beneficial practices until such time as their efficacy can be thoroughly researched. Exactly how this should be done will vary from place to place.

Further Reading


Isbister GK,and Hu Wen Fan (2011) Spiderbite The Lancet 378; 2039-47


21) Urban versus Rural Health.

*Health care access and utilization, cost, and local distribution of providers and services is affected by the environment of the city versus the village*

**KEYPOINTS:**

About half of rural populations have in one lifetime moved into a town environment. ‘Access’ was one of the most used words in Public Health some 40 years ago. Long distances separated most people from the best of care. Now to the vocabulary *Developed and Developing World* we must add *Transitional*. Dermatologists have never populated the *Developing World* but now the *Transitional World* can provide many of them with an income almost to its borders with the countryside. The car and the motor bike increase access but raise the injury level of the pedestrian. While the railway and bus station, school and super market may be more accessible to some, they are less accessible to others and where there is rising human density there is a rise in criminal activities including assault.

**Warning !**

Skin Health following general health and well being has changed proportionately with this rural to urban shift. Access to water, firewood, shops and schools, different quality of housing, availability of a different kind of employment brings with it a change in body weight, different foods, more smoking and more sex workers. There is no where to disperse sewage or plastic bags. These block drainage and house mosquito larvae in small amounts of retained water. For children, overcrowding brings more head lice, scabies, impetigo and superficial fungus infections.

Road side sellers provide counterfeit drugs and there is less instant advice from herbalists. These too move into cities with less reliable purchase of their favourite remedies as their homelands become deforested.

**Action!**

Availability of electricity in urban and transitional centres adds health messages from local radio TV and the mobile phone, as well as more pamphlets and posters. There is street lighting and frequent public transport. Skin carers of Community Dermatology are aware of needs and their solutions and should not hesitate to voice their opinion to local governance who are less well informed. Researchers from the Universities of Bristol and East Anglia (11,12) found that people living closer to green spaces were more physically active, and were less likely to be overweight or obese, and people who lived furthest from public parks were 27% more likely to be overweight or obese. Greater opportunities for exercise provided by close proximity to a park reduced weight gain in teenagers by five kilograms over a two year period.
A University of Glasgow study found that, for England as a whole, people living closer to green space had lower death rates and less heart disease. Amongst lower income groups, 1,300 extra deaths occurred each year in areas where the provision of green space was poor.

The urban environment in the developed world provides some of the best managed park lands as in London or New York. What is also needed is small spaces for gardens and allotments. The concept of Gardens for Health is new to dermatology. It is not new to Public Health and Community Medicine. Trees and woods can enhance social cohesion between Health Service estates and local communities through joint involvement in planting, maintenance and enjoyment of trees and woodland. The United Kingdom National Health Service (NHS) has a web site www.nhsforest.oxtreegen.com, covering NHS needs and growing forests for health. There is data suggesting that looking out on trees from a hospital bed is healing! See also NHS FOREST GUIDANCE PACK www.nhsforest.org

As people survive childhood and live longer, there is a double burden of only partly controlled infectious disease, such as tuberculosis or HIV/AIDS, plus degenerative age associated illness. In cities the elderly have this burden very often in greater isolation than in a rural environment.

As described in the Capacity to Benefit section of this website a disease such as leprosy can be well managed in a large city such as Mumbai.

In many rural areas large ethnic groups may survive with different habits and their own language. They may be ignored by rural governments. These as they move into urban environment become Ghettos. Integration becomes easier but often there is too little effort to make this succeed.

Where in the USA there are black and white populations the black are usually in poorer health, less likely to be educated and less likely to wear crash helmets or seat belts, or to avoid guns viz: a recent study of 10 and eleven year olds in Birmingham Alabama and Houston Texas (N Engl J Med 2012:367;735-45)

Further Reading

http://www.uniteforsight.org/global-health-university/urban-rural-health
24/8/2012


KEYPOINTS:

Studying the origin of sexually transmitted disease helps us to learn the political, economic and moral conditions that lead to disease.

The students of the Regional Dermatology Training Centre in Moshi, Tanzania provide a model of Community Dermatology in the field of STI, HIV/AIDS. WHO estimated that 340 million new cases of the four main curable STIs namely gonorrhoea, chlamydial infection, syphilis and trichomonas occur every year, 75-85% of them in developing countries. “

Relevance to Skin Care:

Venereology is an outdated term but still used as a title for long established societies or journals. Mostly inclusive of HIV/AIDS, it is now usually referred to as Genito Urinary Medicine or Sexually Transmitted Infections (STI) the headings include a)value of recognition of physical signs (diagnosis) b)Essential drugs (Therapy) c)Contact Tracing. In a 2011 Review of Venereology in India Thappa and Sivaranjini state “The lack of good data and notification systems has often been overcome by prevalence studies. Such information is useful but limited since it is not totally representative of the population as it is obtained from atypical, high risk and usually consulting group of individuals and/or patients.

Dermatology separated off from Venereology in post war Britain but most countries expect dermatologists’ clinics to receive persons so infected and a multi-presentation disease such as syphilis or HIV needs the diagnostic skills of the Skin Specialist.

HIV/AIDS presents frequently in its early stages as in need of skin care. It has increased the burden of disease and should note sources of education for such skin disease, See Hu et al 2011 who refer to the programmes of the International Foundation of Dermatology in Tanzania (RDTC) and Mali. The American Academy of Dermatology in Gaborone, Botswana, to South Africa, Ethiopia, and Egypt, to Uganda to courses in London, Cardiff and Paris, Bordeaux. The International Dermatology Alliance (IDEA) is another organisation providing teaching and teaching material. This need increases with severity and with falls in T.cell count or rise in viral load. Adverse reactions such as Toxic Epidermal Necrolysis further increase the need for expert skin care. HIV/AIDS is relatively very well funded and its admin is criticized for recruiting the best of skin carers but unfortunately it has not contributed to the need for a work force in skin morbidity control. Skin carers ideally integrate with available STI provision without losing autonomy, since experts in STI usually lead as the most...
active and resourced partner. Organised by Noah Craft leading IDEA an organisation concerned with Dermatology’s contribution to HIV/AIDS at UCLA, he wrote “Human immunodeficiency virus and the acquired immunodeficiency syndrome (HIV/AIDS) have greatly complicated dermatologic disease and the required care in most regions of Africa. Opportunistic infections, ectoparasites, Kaposi sarcoma, and skin manifestations of systemic infections are exceedingly common in patients with HIV/AIDS. Dermatologists have contributed significantly to our knowledge base about HIV/AIDS and have played an important educational role regarding the clinical manifestations historically. Because of the increased burden of skin disease in Africa due to the HIV/AIDS epidemic we must redouble our efforts to provide dermatology education to care providers in Africa. We review the burden of skin disease in Africa, how it relates to HIV/AIDS and global infectious disease, current educational strategies in Africa to address this need, and suggest potential solutions to move these efforts forward”.HU et al (2011).

The Regional Dermatology Training Centre in Tanzania is a WHO collaborating Centre for Dermatology, Sexually Transmitted Infections and Leprosy. All students do a study of their own community at the end of their first year, and over the past 20 years there have been almost one hundred STI/HIV/AIDS studies in 14 sub-Saharan countries. They are an example of the action needed.

Warning! Thappa and Sivaranjini 2011 remind us that clinically determined etiological diagnosis in patients with STI syndromes is often incorrect. Laboratory tests require refrigeration of reagents and centrifugation to separate sera from blood and this when decentralised becomes frequently unavailable. The syndromic approach because of lack of access to laboratories works well with men with urethral discharge and genital ulcers but lacks sensitivity and specificity for identification of infections in women.

The prevalence of viral infections Herpes Genitalis and genital warts is a further threat to a universal sexual healthy life style and a world free of sexual ill health (Philipot 2005.)

ACTION POINT! Following training of students of the Regional Dermatology Training Centre in Tanzania each of their many dissertations on STI can be regarded as a model for future studies. There is an introduction describing the country, location, climate and area as well as its administrative divisions and its population demography, economy and health services. The frequent objective is to determine the prevalence of STI and study the sexual contacts.

**Community Dermatology in Practice: Sexually Transmitted Infections and genital conditions in more than 30,000 Africans studied at THE REGIONAL DERMATOLOGY TRAINING CENTRE. Moshi Tanzania.**

Surveys of the level of knowledge of those who treat STI change as the experts introduce new management schedules, the Syndromic Approach being one of these, was slow to reach the private sector in Kenya (Alloys Musuya 1998 Mombasa Kenya) but in Tabora Tanzania the Private sector was better informed than the Government sector (George
Msalale 1998). Sunganani Prisca Manjalo examined the affectiveness of syndromic management in clients attending clinics in Chiradzulu district Malawi. 6 out of 12 clinics were selected by cluster sampling and 122 clients seen and interviewed when first seen and on follow up. Only 51% were cleared of their symptoms and this depended on drug compliance in 71.4%. 58.1% of partners did not report to the clinic for assessment, accounting for treatment failure.

Mwinde Lascol of Mbala District Zambis in 2009 examining the syndromic approach as used by 86 health service providers. Only 53.3% were able to use it and there was overload of the laboratories. Poor supervision in 62.5% was a factor

Lute Kibopile examining the Genital Discharge Syndrome (GDS) in Mbeye Tanzania on the borders with Zambia found 86 of 120 attendees positive and half with multiple sexual partners. He confirmed GDS predisposed to acquiring HIV

Education in Schools Sexual relationships in Africa often begin as early as ten years and more than a third of girls have had a relationship by age 14. It is thus necessary for School teachers in primary schools to understand the problem of HIV/AIDS. Levison Kumbani Mwale in Blantyre, in 2000, found that experienced and older teachers did have such knowledge but he recommended that the Ministry of Health and Ministry of Education should jointly work together to provide relevant literature and inservice workshops. Clement Mtika in Malawi (1998) examined 461 secondary school students from six schools, knowledge of HIV/AIDS was varied but 57% of the males had a sexual partner and 39% more than two partners. Less than half of the students claimed always to use condoms. A small proportion of students (mostly female, possibly with low experience and knowledge) claimed to be abstaining from sex. In Mwanza town Tanzania, Lilian Peter Kopwe in 1998 found a high level of knowledge. Thus there were 268 of 490 secondary school children abstaining, 217 using condoms, but 55% of these had irregular use. 60% of the males and 78% of the females had no current sexual partner. 24% reported one sexual partner and 6% more than one partner.

In Malawi in 2000 Peter R S Nyasulu found 25 secondary school children of 379 interviewed had STD. Almost 100% sought treatment immediately as they were aware of infection and this was influenced by peer pressure. Peter RS Nyasulu was strongly in favour of participation in the annual secondary schools drama festival to facilitate preventative messages. Goodness Tebha Thwala in 2004 in Manzini Swaziland compared 100 high school children from a Mission School with 100 High school children from a Government school. Pupils in the mission school had a higher level of knowledge, 46% compared to the government school 27%. But this could not be attributed to religion. Parents contributions to sex education focusing on abstinence was less of an influence than the 100% influence of school teachers. In focus discussion cultural beliefs such as traditional initiation ceremonies, nude dancing, widow inheritance and wife cleansing, polygamy forced
marriage or THP scarification was thought to contribute to unsafe sex. Christine Salbei, also in 1998, but in Nakuru town and Koibatek district Kenya, also found a high level of knowledge in secondary school children. 56.5% recorded never having had sexual intercourse (75% female), but of the other 162 students there was only 3 with one partner. 13.7% always used a condom and 24% only occasionally, 12% never used condoms when having sexual intercourse. Nicholas Omolo Pule in 2001 examining 400 children in secondary schools in Kisumu district of Kenya found the problem to be not so much lack of knowledge about sexual practices but failure to recognise when they had acquired STI. This was important because more than one third had more than one sex relationship and 40.3% did not use a condom. Lack of privacy in stores and by condom dispensers does not help according to Nicholas Omolo Pule. In seeking to understand how children learn about skin affected by STI/HIV/AIDS Stephen M Nyangu in 2000 was surprised that parents in Kitwe Zambia were principal disseminators of sex education. 67% did so, but their value of their communications was limited viz: “Do not drink alcohol” “go to church regularly”, “abstain from sex”. Parents were not prepared to advise use of condoms. In only 58% of families did women educate the girls and men the boys. The information imparted was very different. This survey was done in a Christian Community.

**Susceptible Groups** Chinyama Manyika in 2000 in Kasama Urban Zambia interviewed 150 traders with stands displayed in the morning markets and who packed up in the evening. 40 of them had or had had STIs of which 43% had more than one sexual partner. They were not inclined to use hospital and Health Centre services because of a perceived lack of drug availability and long waits. Manyika would like to see distributed more posters and a quicker service to be provided for these so called “Make–Shift” Business persons.

Anthia Nomgcobo Magagula from Swaziland in 2000 focused on the prevalence of genital ulceration and urethral discharge in 296 male inmates in 6 of 11 prisons. There was only 3 genital ulcers and 3 urethral discharges. Sodomy is a criminal offence in Swaziland. Condoms are not provided in prisons and while some homosexuality was detected this questionnaire study encountered many difficulties. Only 4 of 13 prison nurses had received training in the management of STIs. Magagula recommended a joint approach of the Ministry of Health and Ministry of Justice to the protection of boys and stricter supervision. Clearly prison health workers should be involved in Government STI/HIV/AIDS control programmes.

Mohamed Seif of Zanzibar in 1994 imagined that, like lorry drivers or sailors with a reputation of having a sexual relationship in every port, fisherman staying at a fisherman’s camp would provide evidence of promiscuity. He found their impeccable behaviour unbelievable and in need of further studies. Seeking in 2005 to examine the role of migration Adhi R Bino and two research assistants examined the prevalence of HIV in a nomadic community in Marsabit district Kenya. Of the 177 examined 5.1% were sero positive. A major determinant was frequent change of sexual partners, little use of condoms but a good level of knowledge of HIV/AIDS in over half the community A
comparison was made with less mobile members of the community at a trading centre on the main Kenya to Ethiopia highway. It was here the positives were found. In 2008 a study of 149 members of a Tonga tribe who practice polygamy and wife inheritance it was found that they had a high awareness of HIV risk and although they had strong beliefs in witchcraft did not think these it was a cause. They were 96.6% Christian but other sources of sex education were NGOs or the radio. Records showed that male HIV prevalence in 2001-2002 was 15.5% and 14.3% in 2007.

Condoms Most of these studies report on the use of condoms and where the prevalence of genital discharge syndrome (GDS) was as high as 52% viz: in Blantyre District Malawi. The cultural acceptability and competence of home based surveys reveal in discussion a very full account of sexual practices and taboos. In spite of the obvious advantages, advocacy is not helped by slogans such as “the foreigners thing” or the implacable opposition by Catholic and Muslim leaders burning condoms in Kenya.

One of the few investigations reporting that knowledge of condom usage was good (91%) Goodson Elijah Siwale Zambia 1998 writes “It is not easy to discuss issues pertaining to religion without sounding less religious or blasphemous even though that is not the primary intention. It would seem naive to suggest or infer that only Christians had health seeking behaviour. When patients were probed one in ten believed the condom was only permitted as a barrier contraceptive method of family planning. Nearly 40% believed that condom use was not permitted at all. But more than half believed otherwise and thought condoms were permitted and 95% said they could afford them.”

Usage skills were good (97%) according to Ernest George Mhando in 2004 in the Guest Houses (72.3%) and Bars (94.3%) of Lindi Tanzania. Thus as in a dissertation by the nurse Yvonne Siyongos in 1993, studying the factors related to low acceptability and use of condoms among 125 male government workers at Katima Mulio Town, Capriva Region (Namibia), there was both a statistical analysis of her findings and in the discussion many quotations giving insight into the views of men and women users or non users and an anti condom view from 90% of the Roman Catholic Church priests at that time. Jailos Samson Sote, in 2007, examining 204 attenders at a Care and Treatment clinic in Tanzania observed that formal education in schools had been an encouragement for usage of condoms, while there was a utilisation of 26% where there was no restrictive religious belief compared to 79.8% where there was a restrictive religious belief of 79.8%. Sharon Mwila Kanchella in Kalulushi District Zambia (2006) found only 6.8% of females used the Female Condom. They have limited availability and are too expensive. In her study the inhibitory effect of religion was not statistically significant. Liteta, in Zambia, a country with an HIV prevalence in 2007 of 16.5%, in a study of 195 Taxi drivers found they had a high level of awareness but 18 with low awareness had been influenced by restrictive religious teaching inhibiting discussion of the topic. Although the church can be blamed for some of its views
Khumbo R Mbewe in Blantyre and Khabonina I Makhubu in Manzini Swaziland (2006) point out that discouragement of multiple sex partners, among whom, as in Blantyre, Malawi, there is an associated prevalence of the 65% genital discharge syndrome, is perhaps the best available advice. Arafat Jones JK Kwaule Malawi 2010 argues that empowerment of women and being above the poverty line adds to the chance of STI, if in seeking multiple partners to satisfy the wish to have children, becomes a factor.

Oliver W Mwamanga 1998 in Mbeya Tanzania where in antenatal clinics in 1996 18.7% were HIV positive and 6.8% had syphilis, there was in 1998 a high level of knowledge. 59% were married, but amongst many business men and their housewives, that were all Christian, there were only 11% regular condom users when interviewed at an STI clinic.

**Self Medication** One concern is self medication with antibiotics when infected persons buy medicaments over the counter at chemist or general shops, or from the street seller, or obtain them from friends. High fees, lack of drugs and long waiting hours are reasons given in the following studies. Advice often was provided from friends and relatives. In 1999 a Zambian study by Charles Hakoma 89 out of 112 patients interviewed practiced self medication of biomedicine and half that number used traditional medicine. In Lilongue Malawi, Eustice Blessing Namacha (in 1999) 75 out of 100 patients practiced self medication, 60 used biomedicine “modern drugs” and 28 traditional medicine. In Nairobi FM Mushanga observed that 21 of 108 interviewed used modern drugs and 3 only used traditional medicine. Mushanga states that in urban areas friends tend to be the greatest resource. In Yaonde, Cameroon where 108 of 150 interviewed were self medicated, Boum Marie Michelle recorded that 96 used “modern” preparations and 12 used traditional medicine.

**Contact Tracing**; **Provider Referral** is clearly essential if STIs are to be controlled. Mpumelo F Dlamini in Swaziland (2003) not for the first time demonstrated that few (27%) contacts respond. Often they are too casual or one of too many. Of several possible reasons for this failure, all with statistically insufficient back up she recommended in 2003 a multi-national investigation. In Uganda the STD Clinic at Mulago Hospital (1999) the aim was get the patient to contact the partner (Partner Referral). Only 27.5% of partners responded. Multiple partner relationships reduced this by two thirds.

**Blood donors** There have been reports of Blood donors transmitting HIV over the years. At one Regional Hamis Ajali Said found little change on a yearly investigation over the period 2002-2005. The main risk (20.6% sero positive) was from paid blood donors. From medical students it was nil.

**The prevalence of skin conditions in HIV/AIDS** is well described in the literature. Ogen Joe P’Amula reporting from HIV/AIDS clinics in Entebbe, Uganda found 143 of 159 patients with often multiple skin conditions. HIV/AIDS was often more aggressive and atypical in appearance, lasting more than two weeks and dependent on the level of the CD4 count. The
availability of the required skin preparations was good. Emanuel Peter Gasana (in 2008) in Rwanda records 55% fungal 40% viral 0% scabies 5% bacterial in persons with a CD4 count below 200 and the prevalence of papular pruritic eruption was 53%

**Drug Abuse contributes to HIV/AIDS**

Daisy Masuku(2011)detected increasing drug abuse in the high schools of Manzini Swaziland where in Mankayane Swaziland drug abuse also contributes to teen age pregnancy. Zinhle Dlamini found lack of access to contraceptives and high access to pornographic media.

**Antenatal Care**

Break in transmission of HIV to the foetus is not helped by two thirds of mothers not knowing their HIV status, writes Christabel A Mayienga Kenya 2006. Adolf Mensaii In Kumasi, Ghana states that the prevalence of STI in the South District Hospital in 2001 was 39.6%.This high figure could be explained by the Syndromic Approach which meant that STI included a very high(42%) figure for vaginal discharge.

**Syphilis** Historically detection of syphilis has been a main drive for antenatal supervision. It remains so in many parts of the world. Jamil K A Hajuna, in 1999, at Mbeya Municipality Tanzania reports a review of 308 pregnant women from four clinics selected by multistage sampling techniques from urban and suburban locations. Fifty one were sero positive with syphilis test reagent (RPR+). The risk was greater in those who were married to business men or drivers. In three districts of Dar Es Salaam in 2004, syphilis in the antenatal clinic was found in 14 of a 300 sample. Nine of these had never used a condom and 12 had sexual partner change, 12 were unemployed. The risk was greater with partners of drivers and soldiers.

**Influence of Spouse** Antenatal care services are addressed by Vanessa B Chelimo(Kenya). A 37.6% non attendance, in 2007, is accounted for by the negative influence of the spouse. It was good news that a majority of potential fathers wanted their partners to have good antenatal care. This role of the supportive father also accounted for 83.6% antenatal attendance in Sphiwe’s study in Malawi in 2011.

The prevalence of HIV infection in-utero of 44.1% of 290 respondents found by Lylyan NJ Lutta 2007 in East Kenya was higher than expected and was due to unplanned delivery at home and pressure by relatives to prolong breast feeding.

**Quality HIV Care**

Joash Momanyi Matonda in Msambweni Coast province of Kenya, in 2008, studied persons living with HIV/AIDS, (115) and 85 of their health workers. His main conclusions were that there was a severe shortage of health workers and while the existing workers are
knowledgeable and caring way above his expectations, there is a risk that their job is over taxing and demoralisation and demotivation will be an increasing consequence.. The availability of drugs to treat their sick patients is also inadequate adding to the stress of the job. Some patients walk 200Km to obtain such drugs. At least half the patients cannot afford the investigation needed to initiate therapy. 91.8% of the health workers in rural health facilities expressed the need for a nutritionist to educate and empower them with the information and skills of utilizing the locally available food stuffs rich in the nutrients for proper balanced diet supplements.

HAART

Studies on HAART have been recent such as that by Edwin Simukanga in Zambia (2007) and his observation that Biological Caretakers (Family Members) promote 100% usage by their children compared to Non biological Caretakers only 46%. Daniel Gichovi Nyagah examining those on HAART in the Embu District Kenya, in 2001, made the important observation of the adverse effect of abuse of alcohol, cigarettes and drugs in a proportion of these patients and the need for better counselling. Alcohol is blamed for failure in 62.5% in a study from Claud Leo Mango in Dar es Salaam (2010).

Street Children and Homeless people

Albert Wagura Taiti examined 106 homeless people in the Nakuru Municipality Kenya. Their risks included unhygienic eating conditions affecting 74.8%, accidents, rape, homosexuality and casual sex. The male dominance was explained by the huge risk of enforced sex for females who tried hard to find security free from sexual harassment. The majority in this study were children or adolescents there being only 9 adults. 88% could not afford a visit to health services and so self medication influenced by a surprisingly well informed peer group was the norm.

Counselling

Health workers in Kenya (Malindi District Hospital) face severe challenges in providing a Counselling and Testing service with only 57% of those trained able to provide a service, due to problems of access, deficiencies in training and availability of testing kits. In Zambia a study by Charity Likasi in 1998 of counsellors in Lusaka also found that severe constraints were pressure of work due to performing other duties (88%), uncooperative clients (30%), lack of transport (14%), lack of privacy (11%). In the same year in Kenya a similar study with similar findings by Joseph Murika Wakubwa added a further constraint which was that recruiting counsellors that were much younger than the clients made it difficult to handle those who knew more about sexual life. It contributed to the high rate (42.8%) of uncooperation. (Godfrey Njoroge Muriu 2007) Difficulties of access by clients to Voluntary
Counselling and Testing in countries like Rwanda account (Athanase 2007) for as low as 49.1% utilisation. And in Kalulushi district Zambia in an examination of 400 persons with 86.3% non utilisation was attributed to long distance, lack of awareness of the service and a justified perception of lack of privacy, spouse family negativity, ignorance of HIV/AIDS and fear of a positive result and subsequent depression, especially in those who are feeling well. As the usage of terms such as compliance and concordance is replaced by adherence Richard P Matembo, in the Lusaka district, finds inadequate counselling and monitoring and an additional factor not mentioned in other studies that 54.7% of 300 patients found that taking so many pills a considerable burden. Goodson Elijah Siwale in Lusaka 1998 found a high level of promiscuity and rates of infection, failure to use condoms for casual sex, but higher rates of of commercial sex workers (CSW) encounters.

The Female Condom

Caroline Alitwala (2004) assessed the utilization of female condoms in Family planning clinics in Entebbe, Uganda. Only 11 out of 200 interviewed used them. The explanation was that 38.5% were not aware of them and of those aware, 50% did not know how to use them. 25% said their partner disliked the use of the condom. Only two had religious objections Eunice Kyei Baffour from Kumasi Ghana in 2001 interviewed 220 Commercial Sex Workers and addressed their use of the female condom. These are too cumbersome, take too long to insert and the outer ring is unattractive to men. Hence only 34% of CSWs have used them. Under the heading of empowerment of women she states that sexual intercourse should be for pleasurable feeling, expressing love, becoming pregnant by choice, and to avoid STI and unwanted pregnancy women should be able to choose their sexual partner, negotiate when to have sex, choose when or if to become pregnant, prevent STI and be free from sexual violence and forced sex”. In a related study Patrick Chibuye in the year 2003 in Kalulushi District in Zambia discusses Dry Sex. In this Copper Belt mining town the prevalence of AIDS is 20%. Workable interventions depend on knowledge of sexual practice. Drying astringent agents heighten the sense of tightness during penetrative sexual intercourse. Removal of lubricating vaginal fluid increases susceptibility to infection. Condoms are likely to break. Chibuye found that 97% of women using dry sex do not use condoms. In a study of 231 CSWs, 69% used the practice. Where there was a low level of education in unmarried women or multiple partners it rose to 100%. Male preference and peer advisers were mostly responsible because the women themselves find the practice uncomfortable. There are usually lacerations and much increased likelihood of infection. The agents used are dry crystals imported by business men from the Democratic Republic of Congo, Herbal powders, lemon juice, ground paw paw roots, coarse salts or vinegar. Patrick Chibuye recommends the MOH to invest in more education but also to legislate against some aspects of the practice.
**Breast Feeding**

Since breast feeding can transmit HIV, milk substitutes are recommended but if improperly managed carry risks of other infections. In the African Scenario solving this problem is complex and the need for education is described by Aubrey Chileshe from Zambia (2010). Fatima Kalima (2010) from Malawi recommends the Ministry of Health “should support exclusive formula feeding to those HIV infected mothers who cannot manage exclusive breast feeding so that they can avoid mixed feeding practice.”

**The circumcision debate**

Recent research has indicated that the male foreskin should be removed to enhance resistance to STIs. It is an operation with an ancient history that may be based on a similar belief. It is possible also that regular retraction and washing may reduce the loss of barrier function that is a feature of the unwashed genitalia. The America Journal of Paediatrics (1999) does not recommend neonatal circumcision. The Royal Dutch Medical Association stated in 2010 that it is an abuse equivalent to female circumcision. In Sweden it is illegal in the first two months of life. In Germany a court ruled it to be illegal when performed on boys too young to give consent. But the Government and The German Ethics Council has voiced support for religious circumcision. Cultural beliefs encourage circumcision when Jewish or in some Nations (Angola, the Phillipines and in the USA see BMJ 2012;345:e5776). There are risks of infection and bleeding especially where traditional implements are unclean. (Arie 2010)

In 2008 there was the first RDTC dissertation on male circumcision. It was from Tanzania and out of 115 circumcised there were only 27 with HIV, whereas 115 uncircumcised controls had 84 cases of HIV. A feature of the circumcised was 76% high risk behaviour compared to the uncircumcised (49.6%). Many more of the circumcised had more than 5 sexual partners. 77.51% of the uncircumcised had had STI. 99.1% of the circumcised did not use a condom compared to 83.5% of the uncircumcised.

**Objectives of organisations against Sex Exploitation, Human Trafficking and forced labour**

World wide these contribute to sexually transmitted diseases. Individuals informing governance are at risk from the criminals organizing them but it is a duty of care givers to inform of their existence all local bodies purporting to prevent such activities and to adopt recommended schedules as follows:

1. To increase awareness about the many types and ramifications of Human Trafficking
2. To serve as a resource to the public and advocates by providing valuable information about other initiatives working to address human Trafficking sex trafficking
3. To provide rehabilitation services to current and potential victims.
4. To encourage policy at local and national levels that will contribute to reducing human trafficking and abuse.
5. To provide insight in the activities in the field of science and policy interface;
6. To build a platform of knowledge at an international level

Further Reading

Ameen M (2011) HIV-related skin diseases in the era of AntiRetro Viral Drugs (ARVs): increased incidence of drug-related adverse effects and Immune Inflammatory Reconstitution Syndrome (IRS)-associated skin diseases. Community Dermatology Journal 7: 3-6


Waugh M. (2006) HIV infections and AIDS: a review 3;7-8

23) Water for washing.

KEYPOINTS:

There are predictions that the next World War will be over the control of water supply. It will be averted when Carers of the skin demonstrate low cost available technologies for cleansing water and encourage its use for the improvement of health.

Washing of the failing skin should be with water fit for drinking. Water must be conserved.

"I ask to speak to the women (a request not always entertained). They tell me they have enough water to wash every four days. They change their clothes every two weeks. They have complaints about bad roads and absentee teachers. But when I ask what they most want to change about their lives, they drop their veils and yell: "Paani" (water). It takes me a while to recover from the sudden increase in decibels. Then one woman adds quietly: "and we don’t like building houses with cow manure." Luce E Financial Times South Asia Correspondent 2004

Relevance to Skin Care

Water is an essential component of the skin. It ensures that it is pliable. The outer layers control water loss only when there is sufficient water in the stratum corneum. Moisture is essential for rapid wound healing. Contamination of water whether by infectious organisms or by heavy metals such as arsenic has significant skin care consequences.

Warning! By 2025 the United Nations estimates water scarcity will threaten day to day survival of 1.8 Billion people. Some say the next World War will be about water. Much of the world has water that is undrinkable. Even when it is plentiful, as in the Pakistan floods, it remains a threat to survival through its effect on crops and cattle and the spread of diseases such as cholera. More than 4,000 children die every day from diseases caused by unsafe drinking water. In the developed world marketing of water in bottles has led to excessive and unnecessary drinking. Noakes (2012)

According to the WHO report “Epidemiology and Management of Common Skin Diseases in Children in Developing Countries” (Mahe and Hay, 2005):

“…despite the relative paucity of objective data and some methodological restrictions, it can be assumed that the main etiological factors whose role is probably significant in developing countries are a hot and humid climate (pyoderma), low hygiene and poor access to water (pyoderma), high interpersonal contact and household overcrowding (scabies and pyoderma), and certain other skin conditions like reactions to insects bites and scabies (pyoderma)…”.
“It was in Tanzania that the surgeon Peter Bewes first emphasised that, when cleaning wounds, water had to be “fit for drinking” and not necessarily boiled. He was well aware of the difficulties of heating water in the developing world (Bewes, 1976). A recent Cochrane review concluded that using tap water to cleanse wounds did not increase infection rate and that, when of drinkable quality, may be as effective as sterile water or saline and more cost-effective (Fernandez and Griffiths, 2008).

There are three main calls for water in skin care, thus, namely (a) dermatology and sexually-transmitted infections (b) wounds, burns and lymphoedema (c) neglected tropical diseases. Water, therefore, is of obvious and major benefit but its availability is often compromised by its lack. This may be due to seasonal variation, climate change or strife. There are several ways of cleaning water so it is fit for washing wounds and for drinking. One method is to fill plastic or glass bottles and place them on the roof in the sun for 6hrs. http://www.sodis.ch/index_EN

**PUR Water Purifying Technology**

Procter and Gamble’s technology for water purification (PUR) is widely distributed as a humanitarian initiative to meet the need of water for drinking and is currently in use in centres of need around the world, including Haiti. In disasters such as the flooding in Pakistan, it is fitness for drinking rather than shortage that is the major problem. Following a Memorandum of Understanding between The International Foundation for Dermatology and The International Skin Care Nursing Group, a number of studies and explorations of the potential of PUR for skin care have been initiated, some of which are summarised in this paper.

PUR is a powdered purification technology packaged in 4g sachet, using ferric sulphate as a coagulant (neutralising charge on particulate matter, causing flocculation within 10 minutes under constant stirring) and calcium hypochlorite to impart residual chlorine as a disinfectant. One sachet treats up to 10 litres of contaminated water.

It provides significant knock-down of bacteria (>6.0 log reduction), viruses (>5.0 log reduction), chlorine-resistant cysts eg. giardia, cryptosporidium; (>3.0 log reduction) and is also effective in removing/reducing to below WHO guidelines heavy metals (arsenic, lead), pesticides and organics (Souter et al 2003)

It is rapid-10 minutes of constant stirring followed by 10 minutes of standing produces up to 10 litres of purified water.

It provides a dramatic visible signal that the water is getting cleaner, even in highly turbid water, and this has been proven, in field studies in Guatemala, to increase user confidence and over all compliance.

The portability of the lightweight sachets makes them a viable option for distribution to victims of emergencies and natural disasters or to hard-to-reach rural areas.

Only simple, readily available implements – a container, stir stick and filter cloth- are needed to use PUR.

Residual chlorination means that water will retain microbial stability for about a day- although purified water can be maintained for longer using simple techniques (eg storing in a plastic container and placing in direct sunlight throughout the day.)

For further information see *Capacity to Benefit* this website www.skincareforall.org Matts and Ryan Water and the Skin.
• It provides a dramatic visible signal that the water is getting cleaner, even in highly turbid water, and this has been proven, in field studies in Guatemala, to increase user confidence and overall compliance. PUR is a powdered water purification technology packaged in a 4g sachet, using ferric sulphate as a coagulant (neutralising charge on particulate matter, causing flocculation within 10 minutes under constant stirring) and calcium hypochlorite to impart residual chlorine as a disinfectant. One sachet treats up to 10 litres of contaminated water.

• It provides significant knock-down of bacteria (>8.0 log reduction), viruses (>5.0 log reduction), chlorine-resistant cysts (e.g., giardia, cryptosporidium; >3.0 log reduction) and is also effective in removing / reducing to below WHO gu•

It is rapid – 10 minutes of constant stirring followed by 10 minutes of standing produces up to 10 litres of purified water.

• It provides a dramatic visible signal that the water is getting cleaner, even in highly turbid water, and this has been proven, in field studies in Guatemala, to increase user confidence and overall compliance.

• The portability of the light-weight sachets makes them a viable option for distribution to victims of emergencies and natural disasters or to hard-to-reach rural areas.

• Only simple, readily available implements – a container, stir stick and filter cloth – are needed to use PUR.

• Residual chlorination means that water will retain microbial stability for about a day – although purified water can be maintained for longer using simple techniques (e.g., storing in a clear plastic container and placing in direct sunlight throughout the day).

The U.S. Centres for Disease Control and Prevention and Johns Hopkins University have conducted 5 clinical trials of PUR and proven that it significantly reduces diarrheal illness in children and the total population.

In the last few years, 240 million sachets have been distributed (equating to 2.4 billion litres of clean water provided), working with over 80 strategic partnerships worldwide. Currently, the gift of over 6 million sachets in Haiti is an example of benefit.

Clearly developed as a technology to provide clean drinking water, PUR is also ideally suited to providing “water fit for drinking” for bathing / washing at risk / compromised skin in developing countries with scarce / contaminated water supplies. PUR already has a relatively mature distribution network in developing countries which enables a potentially rapid and simple re-direction of some PUR supply to meet skin needs. Indeed, the separate needs for clean water for drinking and for bathing will likely be co-located geographically, considering the overwhelming commonality of cause in morbidity, that of microbial contamination.

**Warning!** There are also significant advantages in a system that does not use boiling as a means of sterilisation. Boiling requires fuel and, in the developing world, wood for burning has resulted increasingly in deforestation. There are also many reports of respiratory disease (from smoke inhalation), childhood burns, and even the rape of women as they walk further from home to obtain firewood.

**Conservation of water**

As water continues to become an increasingly precious commodity, its conservation is a matter of urgent global attention and this is certainly the case with water for bathing.. Even
when pouring water from a container onto the hands, most of it spills onto the ground. If poured slowly onto a cotton towel or onto paper or even onto a sponge of lichen, however, water is conserved to a great extent. In this way, it is possible to wash the whole body with only 100ml of water. For example, rather than direct application to skin (resulting in significant wastage of resource), modern absorbent paper (of the type used in kitchens and which retains mechanical strength when wet) can be wetted by pouring water slowly on to it, minimising wastage.

Furthermore, attention is also turning to efficient humectant technology to retain water on and in the stratum corneum, to augment and promote skin barrier function. Glycerol remains the cheapest, most potent and skin-active humectant in our arsenal and, besides these properties, also has antibacterial, anti-viral and anti-inflammatory properties (Fluhr et al., 2008). Procter & Gamble remains the world’s largest manufacturer and supplier of glycerine and donations are now in the RDTC where trials will assess the utility of this agent in the field (e.g., the simple addition of a few percent by volume to PUR-treated wash water to produce a highly effective humectant soak).

Quantity quality, temperature and additives such as soaps are all requirements for improving the availability and no-wastage needs of the use of water. The optimal temperature of the body does not require boiled water when it is not needed for infection control. Deforestation and the prevalence of burns are just two of the consequences of water use.

The article by Jill Brooks, “Water fit for drinking is fit for washing wounds!” Community Dermatology Journal No 12 (see www.ifd.org) who has used PUR® for washing wounds in an African hospital, found significant advantages for this approach where it not only provided a ready substitute for sterile bottled water, but also a significant cost-saving. With PUR® available, boiling becomes unnecessary. Indeed, wounds need water at body temperature. Most nations have a PUR® distributor from whom this product can be obtained. Those who have access to the internet should Google the Children’s Safe Drinking Water program or PUR® and read more.

Sanitation
The provision of water and, making it fit for drinking and also for washing is inextricably linked to sanitation. The carer of the skin seeking clean water has to be an advocate of good sanitation. There are many guidebooks. Simple ones include Esrey et al 1998. The Millenium Development Goal (MDG)-7 of the WHO and UNICEF is making little progress with the reduction of open defecation. Those who care for the skin of the legs affected by walking in contaminated environments must include cleaning up the environment as part of care.

Further Reading.

of Kerala (Kasaragod, Calicut and Alleppey) and to study impact of entry point education over quality of life of filarial lymphoedema patients. www.iad.org.in


Brooks J (2011) Water fit for drinking is fit for washing wounds! Community Dermatology Journal 7:2-4

Heeg P. (2011) Sterilisation of Banana Leaves, Community Dermatology Journal 7:11

Luce E, (2004) Supply and demand; what has water to do with politics? In India everything. Financial Times Weekend July 24-25th


http://www.sodis.ch/index_EN036-7 (Using the sun to pasteurise bottled water)


24) Xerosis: Dry Skin and Emollients.

KEYPOINTS:

The normal moisturisation of the skin is essential for its functions. A desiccated stratum corneum results in loss of pliability, increased water loss, entry points for environmental triggers of inflammation, and the switching on of repair mechanisms which stimulate an inflammatory response.

The Relevance to Skin Care

Xerosis is dry desiccated skin. Such skin is unable to fully control its barrier function and loses its pliability. It is vulnerable but mostly responsive to the use of emollients. There is a large literature on oiling the skin and on tests used to measure dryness, control of transepidermal water loss, control using emollients and consequent switching off of the skin’s repair mode such as the release of cytokines, and its call for neutrophils is a basic mission for every carer of the skin. They call for glycerol, lanolin, emulsifying ointments, honey and read the recent literature on desirable or undesirable topical activating or soothing agents for a frisky epidermis. In support of their water initiative Procter and Gamble are giving away Glycerol a known ideal emollient. In the Community Dermatology Journal Ryan (2004) stated that oiling the skin is the ‘First Commandment’

In the ancient traditions of the use of goose fat, valuing the vernix caseosa which makes newborn skin so slippery, the activities of the cosmetic industry, or the much used coconut oil to shine the African skin, there is a miraculous first principle. The skin benefits from washing and emollients. Both water, or fresh animal urine, and grease of some kind are nearly always available, sustainable and at low cost; except when refined and perfumed and marketed as a gold standard beauty cream for the those that can afford it..

This miracle, an emollient applied as a first principle for the maintenance of the health of the skin and often to cure it of its sickness, has a rational scientific basis for such claims – and justifies its promotion as the subject of the ‘First Commandment’ in Dermatology.

The Structure of the Skin Barrier in Health

The skin is the largest organ of the body. It is not just a passive ‘sleeve’ keeping our insides in, but it is pliable and elastic, watertight, and an immunosurveillance system keeping out irritants, allergens and infections. Its surface barrier is manufactured by a keratin and lipid factory which is mostly anaerobic from the mid-epidermis to the surface. The components are tightly knit. The factory is policed by immunosurveillance cells ready to detect any foreign penetration of the barrier. There are also the pigment cells, melanocytes, secreting a
free radical quenching agent, melanin, dampening down any potential harmful agents. In health, it all works very well and requires very little fuel. At rest much of the epidermis is anaerobic. Only the occasional migration from, or division of a cell within the basal layers of the epidermis requires oxygen. The provision of tissue fluid and other minimal nutritional requirements, and the balance of tension between fibres and cells by tissue fluid and pressure are controlled, in health, by an effective blood supply and lymphatic drainage in the upper dermis.

In healthy skin while the epidermal factory behaves in this way, little other than a barrier is manufactured and there are no demands for an increase in blood supply. It has even been argued that the richness of the blood supply exceeds the metabolic needs of the skin and that it is necessary for thermoregulation. “Not so!”, says this author, for hardly a minute goes by without injury from a constantly threatening mechanical and chemical environment placing the skin constantly on a ‘war footing’ (expecting attack and defence) demanding an instant increase in fuel supply.

**The Skin at War**

The slightest breaching (damage) of the epidermal barrier places the epidermal factory in a repair mode. Experimentally, this may be a range of insults such as stripping the surface with a few applications of sticky tape, the application of an irritant or allergen, depriving the factory of essential nutrition (as in vitamin or protein deficient experimental animals), pricking the skin with a pin or scratching its surface. Within seconds of a scratch, the axons of the sensory nervous system as well as the mast cells, stimulate the release of agents such as acetylcholine and histamine to increase the blood supply 200 times above the normal non-stimulated level. This is necessary for the fuel requirement of the epidermis as its cells divide, migrate, or manufacture the bricks for the barrier to be repaired, as well as the increased production of a range of agents needed to inflame.

The Inflammatory Reaction is necessary to remove the insult and hasten repair by the recruitment of cells from the blood stream. When the damage is great, a new vascular organ of repair, granulation tissue has to be formed, and eventually removed, to provide enough fuel for the dividing and migrating epidermal cells and the recruited white cells, all of which are demanding oxygen and other nutrients.

It is only during the last few decades that the full picture of the activated epidermis has been seen to be more than just the release of histamine and the production of prostaglandins. It now includes interleukins, interferons, tissue necrosis factors, as well as growth factors such as Vascular Endothelial Growth Factor (VEGF). These are rapidly produced in the epidermis to flood the dermis and activate the blood vascular endothelium – to bring into play the white cells and macrophages for elimination of the undesirable and for repair.
A Correlation Between an Intact Barrier and the Switching On or Off of the ‘War Footing’ Status: Emollients Can Do It!

Contemporary technology can breed mice without essential components for the epidermal factory. This has confirmed that when the barrier is broken, the cytokine production is switched on, and when repair is complete they are no longer manufactured. Probably the epidermis first knows that its barrier is breached when trans-epidermal water flows faster and is lost from the surface. Such flow and loss can be instantly slowed down by placing an artificial barrier on the skin surface, such as an emollient petrolatum, honey or a covering of polythene or hydrocolloid dressing.

Warning! Bacteria and Other Potential or Actual Enemies on the Skin

There are always bacteria on the skin and often viruses, fungi and parasites. These thrive on unhealthy skin, macerated, eczematous, cracked with deep wet crevasses, or moistened under a dried out scale. More than fifty years ago Dermatologists applied large amounts of bacteria and fungi to the surface of intact skin, under a plaster, and there was no inflammation or evidence of harm. When they first, quite gently damaged the surface of the skin by irritants or scratches, there was rapid infection and increased pathology. Loss of barrier function and easy penetration allows infective organisms, not only to invade but to find an environment in which they can thrive and cause trouble. Today, we know that many epidermal products manufactured when on a ‘war footing’ are used by infectious organisms, while some known as ‘defensins’ dampen their capacity to do harm. Penetration of the barrier may allow organisms to go where there are no such ‘defensins’, nor white cells to deal with them.

The clinical picture, for example, is like that of maceration between the toes – nearly always a potential ‘entry point’ for bacteria. Other organisms, such as fungi, may break up the epidermis and add to the barrier breakdown, as may irritants from soil or soaps, or excess moisture unable to evaporate in a humid environment.

A reviewer of water in the developing world finds rivers and wells polluted by cryptosporidium, Giardia, coliphages, E coli as well as human adenoviruses and notoviruses

Action Point! A recent Cochrane review of Impetigo emphasised that antibiotic creams can speed resolution, but given a little time, ointment bases do as well. In the field of Lymphology, treatment of the recurrent inflammatory episodes in lymphoedema, attributed to bacteria gaining easy access through a broken skin barrier, has given strong emphasis to skin care with washing and emollients, rather than hastening to prescribe antibiotics. This self-help, low cost approach explains that washing clears excess organisms and skin surface debris and emollients provide barrier function. Any emollient, traditionally used, is probably safe and an agent such as coconut oil works well. Some cleansing agents from herbals have additional emollient and Skin Care attributes. Tea is antiseptic, antihistaminic and
antioxidant and, like diluted honey, can be added to water and emollient to make a highly recommendable application. In Africa there are more than 300 traditional plant based soaps with a low level of irritancy and allergenicity.

The best emollients are natural to the species on which they are found. In man, sebum and sweat are natural emollients and salty tears and the lipid of the Meibomian glands are exquisitely effective, protecting the epithelial surface of the cornea. Natural emollients, such as wool fats from sheep have long been the basis of the lanolins used as hand and face creams, with a wealth of supportive evidence as to why they are so effective. Together with the evolution of the emollient, Man has evolved ritual washing, written into ancient religious texts, such as in Leviticus (Bible), the Koran or in Sanskrit. Further, the mucosal surfaces in relation to sexual practice have never been the focus of so much attention to the concept of ‘Barrier’, as they are now in the face of the AIDS epidemic.

This author promotes Bee products as perhaps the most successful of agents that protect the bee from a range of infections and should be used for human disease with more confidence. The latest studies show that honey immobilises at least 20 bacterial genes controlling their reproduction. (www.abc.net.au/programsales/programs/s989015.htm)

**Action Point!** Dermatology’s greatest service to ‘Health for All’ may be its promotion of the maxim, ‘cleanliness is next to godliness’. This is supported by evidence and should receive greater emphasis. It is an extension of the bathing used for common skin diseases, of wet wrapping, and the emphasis on emollients in atopic eczema so as to leave a lipid film on the surface of the skin as a barrier contributing to an intact skin. It is found in best Dermatology Nursing practice for the moisturising of dry skin, as well as for the ‘drying’ of the incontinent, whether the infant or the bedridden elderly.

It is the nearest thing to a ‘cure-all’ or the miracle that deserves to be the subject of the First Commandment of Dermatology. It should be regularly prescribed. Even in health, the feel of the presence of an emollient after applying a hand cream soon wears off. For the barrier effect to be prolonged on diseased skin, the application must be very frequent and well spread. The large organ may need to be treated as a whole. The need is for locally available, sustainable low cost provision. It should not sit on a shelf or become rancid in the sun. When prescribed generously, effective use is for now. This has to be understood by the patient and, therefore, good advice and good advocacy are essential.

If this presentation is regarded as too basic, some kind of witchcraft or unscientific, then the following ‘Further Reading’ may provide the necessary Evidence Based Medicine to convince the sceptic.

Severe xerosis is a feature of ichthyosis. This condition consumes huge amounts of emollients Blanchet-Bardonet al (2012) find a preparation containing Glycerol15% and 10% whitesoft and liquid paraffin showed a significant improvement in children.
Further Reading


KEYPOINTS:

Skin failure is an organ out of balance. Management requires the removal of excess and the addition of all that is missing.

Whether Galen’s humors, Indian or Chinese systems of medicine, Claude Bernard’s homeostasis, or Starling’s laws they have the theme balance in common.

Relevance to skin care:

Because so many in the world believe their diseases are occasioned by imbalance it is necessary to understand the process of restoring harmony. The body is largely symmetrical and asymmetry may need to be repaired to restore self esteem. Where asymmetry is a necessary feature it may require the taking advantage of such. An example is in the practice of Yoga in which the stimulus from lateralised breathing to the left sided vagus nerve activates the parasympathetic nervous system.

The reductionist approach of science and the search for single causes is a very different approach to that which see a constellation of factors acting synergistically; a genetic framework interacting with the environment and subject to an emotional reaction before being analysed by the intellect.

Biomedicine’s immunosurveillance is a system of harmonisation and control of imbalance. Much of Traditional Medicine’s therapeutics may be acting through an influence on immunosurveillance. A presentation of tuberculoid leprosy with a hypopigmented patch of skin will in Ayurveda often respond to therapy bringing about balance within the constitution when estimated to be awry, and in doing so it may well be because it is acting through the immunological system.

Whether it is the concept of Homeostasis by Claude Bernard or the Greek concept of symmetry, the desirability of balance pervades many systems of medicine. Hippocrates and Galen regarded health as requiring an equilibrium between the four humors.
, sanguine, choleric, phlegmatic and melancholic. The most ancient is the Chinese concept of Yin and Yang but Ayurveda is also ancient and its practitioner aims to persuade the components of the constitution to show no excess in any one feature; neither too chilled nor too heated, not sluggish nor over excited. These ancient systems seek harmony of man, earth and cosmos.

In Ayurveda the three constitutional types (Doshas, Vata, Pitta, Kapha) should be in equilibrium and may be aggravated or diminished. There are channels along which energy should be directed and there are wastes that must be eliminated. Body mind and souls contribute to harmony. Happiness affects each of these. Like Chinese medicine there are streams of energy. The concept of imbalance is used in Ayurveda to explain disease. It may be due to a misuse of mind or body, time and season. What one eats is a major factor and a route for managing imbalance.

Public health has to address culture, customs, religions, beliefs and ideals. When examining other systems of medicine it is also looking at other ways of life, with attention to physical, mental, social and spiritual well being. When doing so it is surprising how many similarities there are in for example the Chinese system and Indian systems each filtering through populations exceeding one billion, and the many smaller isolated tribal communities found throughout the world who also, like the Australian Aborigines, see their health as integrated with their natural environment and a struggle between imbalances constantly seeking harmony.

One feature that makes traditional medicine of public health significance is that it is locally available usually at low cost. Biomedicine’s single extract is obtainable from a far placed manufacturing unit and by the time it reaches clients it is expensive and its availability unreliable, and its availability unreliable in the developing world.

The Chinese concept is about two opposite and compensatory forces that explain transition such as the seasons and other features found in the natural world, light and shade, wet and dry, hot and cold, the universe and its cycles, and in the human body such as masculine and feminine.

When applied to medicine good health is perfect harmony with a rejection of excesses inclusive of diet and sexual activities. It perceives an ebbing and flowing between Yin and Yang. It may be in the form of energy and it may have is channels for that flow. Yanchi (1988) writes “disease occurs when the dynamic equilibrium within the body and environment fails, damaging the normal physiological functions to the point that there is an imbalance between Yin and Yang, a derangement of ‘qi’ and blood, and an obstruction of the flow of ‘qi’ from the organs”. “The goal in all cases, is to reduce what is superfluous and replenish what is insufficient to restore the relative balance of Yin and Yang on a new basis”. The exogenous pathogenic factors in Chinese medicine include dryness, dampness, chill, heat,
and wind. Imbalances lead to impairment of flow and a need for therapeutic interventions that unclog and promote flow.

Indian systems of Medicine and Ayurveda in particular also see disease as a constitution with imbalances.

**Further reading**


26) Zealousness versus equanimity.

**Key Points**

Taking care of the skin at the village level in the developing world requires zeal as well as equanimity. For some affected persons it is a life long struggle and for the skin carer the topics covered by this ABC often need altruism with little reward. ‘How to triumph in dermatology’ is described by Finlay et al (2012) for the developed world. It is as relevant for the Developing World.
Magnetic resonance imaging has shown that decision making mostly is initiated in the most primitive parts of the brain and are initially emotional rather than rational. They may even be subconscious. David Ogilvy a British Advertising Guru stated “The trouble with market research is that people don’t think how they feel, they don’t say what they think and they don’t do what they say.” Much advertising and social marketing is designed to have both an emotional and an intellectual appeal. Matthew Lieberman and Emily Falk foretold whether people would use sunscreen in the week following exposure to public health campaigns with an accuracy of 75% versus a 50% accuracy based on the test subjects’ own predictions.

Warning! It is clear that “what’s in it for me” determines whether people buy public health offers, and this is based in the emotional centre of our brain. Gunderman and Hubbard (2005) examining the biomedical ethic of wages earned through healing emphasise that income is not the only reward for healing. They point out that hard work in Medicine is not the same as productivity. One may be paid for service and add enthusiastic teaching and research unpaid. They discuss the most highly compensated having a high level of skill, a long and difficult training, great responsibility, considerable mental effort, and living in uncomfortable working conditions. Zeal for improvements in societal needs and the demand for financial resources affecting billions can be compared with zeal for transplanting a life saving organ of one individual. The zeal of Gandhi, Mother Teresa, Martin Luther King and many others was rewarded by public esteem on this earth at least. Gunderman and Hubbard ask “Are we trying to optimize performance for this day alone or to build a strategy that would carry medicine forward for decades?” Questions to ask “What is more important than compensation?” Is it challenge, self development, making a difference or being appreciated? Which of these determine enthusiasm? The answer will in part determine the success of a public health programme such as skin care for all.

Action Point! Those who do a good deed must be thanked. A written thanks in the form of a certificate presented publicly is one way to do it. Promotion with a pay rise is another.

Tackling problems fervently, as a zealot when actively enthusiastic, or with an even mind and temper (Aequanimitas Osler) is linked to how to encourage participation and keenness to get involved and reward altruism, charity, anti-corruption, equity and human rights. When writing about imperturbability, Osler was not thinking of the management of populations but his belief that wide experience and presence of mind, clearness of judgement in moments of grave peril under all circumstances, as well as tolerance, were needed. “To you the silent workers of the ranks, in villages and country districts, in the slums of our large cities, in the mining camps and factory towns, in the homes of the rich, and in the hovels of the the poor, to you is given the harder task of illustrating with your lives the Hippocratic standards of learning, of sagacity, of humanity and of probity.” Osler Aequanimitas and other addresses.
To which one may add working in an environment of strife. All of which one calls to mind when reading reports from *Medicine sans Frontiere*.

As a Curator for 13Norham Gardens the home of Sir William Osler 1903-1919 owned by Green Templeton College Oxford, I believe *Skin care for all* is worthy of an Osler opinion. In delivering skin care and having to negotiate at all levels of society and its administration it is role playing in a political framework. Osler was superb at this. He was in Private Practice and would understand the contemporary issues illustrated by the following ethical dilemmas arising from reimbursement.

Mr X living in a resource poor African country has a diplomat as a father who has given him a good education which he values. He has qualified as a doctor. He now applies to a leprosy charity for funds to train as a dermatologist. That charity knowing the need for expertise in that resource poor country allocates its precious funds to train Dr X. On qualifying Dr X now has children of school age and feels bound to educate them as well as he had been educated. The salary of a dermatologist in his country is very low. He therefore leaves for greener pastures in a resource rich country. This is the best thing he could have done for his children but a great disappointment for the charity that funded him.

Dr X examines a patient with a very small basal cell carcinoma. This is not a tumour with a risk of metastasis. In this case it can be treated with cryosurgery, curettage or a small local excision. Either of these will take only a very few minutes. There are other techniques such as micrographically controlled Skin Surgery (MOHS) that are used for larger lesions. National Guidelines for reimbursement make it clear that surgical treatment of a cancer can justify charging a substantially larger fee than is justified by taking 5 minutes on a simple excision of this lesion. Dr X charges the top fee sanctioned for the removal of a skin cancer.

Altruism thrives on the identification of heroes and heroines and especially on organizations who volunteer their help such as *Medicin sans Frontiere*. It is found amongst those who have a passion and are compassionate. But their long survival depends on equanimity.

**FURTHER READING**


