This house believes that surgical training can only be achieved by non-compliance of the working time directive.

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European working time directive

“The individual patient, for whom we are responsible, must count on our presence and help if critical situations threaten his/her life or psyche. Such an obligation does not fit into the bounds of an 8-hour day or a 5-day week”

Rudolf Nissen 1896-1981
European working time directive: a mess for surgeons?

“We have got into this mess because a group of professional people, surgeons, have had their hours of work defined for them by others with little or no knowledge of the work concerned”

John Black, President of RCS England
European working time directive

- Working week an average of 48 hours
- 11 hours rest a day and a right to a day off each week
- A right to a rest break if the working day is longer than 6 hours
- Opt out clause (only for doctors able to determine their own hours?)

- Maximum of 72 hours in any 7 consecutive days
- Maximum 13 hour shift
- Maximum frequency of 1:2 weekends
- 30 minute break for 5 hours worked, and again for more than 9 hours
USA ‘working time directive’

Working week maximum of 80 hours (averaged out over 4 weeks)

A right to a day off each week

In-hospital call no more than 1:3

10 hour period free of duty between duty

First year graduates maximum 16 hour shift

Intermediate graduates 24 hour limit to continuous duty
RCS working party 2014 implantation of EUWTD

NHS should review best practice (patient care and junior training)

Specific challenges faced by some specialties needed to be addressed

Lack of flexibility from legislation should be tackled

(ensure doctors don’t suffer undue fatigue)

Create protected education and training time

Contractual negotiations with junior doctors and NHS

Encourage wider use of opt out
European working time directive: a mess for surgeons?

Short term

- Loss of training opportunity
- Reduced rota cover
- Multiple handovers
- Lack of continuity of care

Longer term

- Reduction in training opportunity
- Focus on service provision

Drive to shift work and ‘official rotas’ disingenuous – health and safety
Working hours and training

Tired, inexperienced and poorly supervised doctors make mistakes

Variations in:-

- Implementation and controls over actual hours worked
- Environment available for learning
- Degree of real supervision

Practitioners or doctors in training?
Working hours and training

Practitioners – experience takes time

Random

Unstructured

Patron-dependent acquiring of skills

Doctors in training

Structured

Requires consultant supervision (more consultants)

‘Making every moment count’

Requirement for structural changes to service delivery and training
Working hours and training - recommendations

Association of Surgeons in Training
- recommend 65 hour average working week

Royal Australian College of Surgeon Practitioners
- recommends 60 hour week
- balance for technical and nontechnical training needs

USA – Accreditation Council for Graduate Medical Education
- recommends 80 hour week

No recommendation for Consultant numbers for supervision/training
A credible transplant surgeon

Surgeon defined by:

- **Training** – general surgery and specialist (adult and paediatric)
- **Experience** > 10,000 hours – getting confident
- **Technical competence**
- **Clinical competence**
- **Psychology/character and risk taking**

- **Colleagues** – multi-disciplinary team (individual and the team)
- **Surgical team - hierarchy**
- **Unit and Institutional ethos/ ethical stance (governance)**
Learning about liver transplantation – gaining experience safely

Transplant assessment - judging risk and co-morbidities

The perfect transplant – competence? 25 transplants

Using marginal grafts – learning from others

Back to back transplants – tiredness and competence

Retransplantation – developing technique

Complicated transplants – portal hypertension, PVT, cocoon, HA

Variant transplants - splitting, living donation, auxiliary, DCD, domino

Massive haemorrhage – coping with 120l blood loss

The unexpected - peri- and postoperatively - consult colleagues

Coping with disaster – recognise early and getting timely help
TEMPORARY PORTOCAVAVAL SHUNT

Portal Vein Thrombosis

- Thrombus
- Thrombectomy
- Graft PV
- Vein graft interposition
- Jump graft

PV: Portal Vein
SV: Superior Vena Cava
SMV: Superior Mesenteric Vein
IMPLANTATION OF LLS GRAFT AND TRIANGULATION TECHNIQUE
SPLIT - LIVER GRAFTS

SEGMENTS V TO VIII
- RIGHT SUPRA-HEPATIC VEIN
- COMMON BILE DUCT
- RIGHT PORTAL VEIN
- RIGHT HEPATIC ARTERY
- INFERIOR VENA CAVA

SEGMENTS II AND III
- LEFT SUPRA-HEPATIC VEIN
- BILE DUCT
- PORTAL VEIN
- COELIAC TRUNK
A Mother’s Gift of Life

BY FLEUR BRENNAN

As her baby daughter’s liver failed, Veronica Carolan volunteered to donate part of her own. But the hazardous operation had never been tried in Britain

VERONICA CAROLAN longed for a child, yet at the age of 39 she and her husband Eddie had begun to give up hope. Then, at the end of 1991, she was overjoyed to find she was pregnant. Seven months later, she gave birth to a little girl. She’s beautiful, thought Veronica as she looked down into the perfect, button face surrounded by black hair. We’ll call her Audrey, after my mother.

Because Audrey was a month premature and weighed only 5lb 4oz, she spent her first three weeks in the special care baby unit, where she was fed through a tube. When the time came for Veronica to start breastfeeding, the baby couldn’t seem to get the hang of it. She took two hours over every feed, yet gained only eight ounces in the first month.

Back home, Veronica struggled to feed her fretful daughter two out of every three hours, night and day.
Working hours and training

5 years ‘training’ in surgery

Available time approximately 10,500 hours

Technical time? 20 hours per week

approximately 4,400 hours

Non-technical time? Structured 2 hours per week

Service delivery? Rest – hanging around

It's not enough!

Need for a fellowship
Working hours and training in transplantation

Unpredictable
Out of hours
Longer surgeries
Provision of retrieval surgeries
Implantation and patient follow up
Complexity of donor and recipient
Lack of simulation models
Absence of appropriate funding for training

Training within 48 hours only by having grey areas of on call, on duty and training
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YES

Inflexibility of ‘rules’ of working time directive
Lack of organisation/infrastructure for transplant activity
Lack of investment in training of junior staff
Inconsistent consultant buy-in to junior training
Lack of surgical hierarchy

Management by fudge
This house believes that surgical training can only be achieved by non-compliance of the working time directive

YES

Trainees believe this

- Attend operating when off duty
- Informally opt to work longer hours
- Gain non-technical experience in unstructured ways
- Creates a culture of flexible boundaries
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**THE SOLUTION**

Structured 5 year surgical training to include GI and vascular Fellowship for 2 years
- Liver transplantation and HPB
- Abdominal transplantation

Investment portfolio (money for training) for each trainee

Consultant apprentice – defined mentoring

Flexible interpretation of EU working time directive