LIABILITY FOR SERUM HEPATITIS IN BLOOD TRANSFUSIONS

I. INTRODUCTION

In the past legal recovery has been uniformly denied for blood and plasma transfusions causing homologous serum hepatitis. Two recent state supreme court decisions have departed from this previous trend. In Cunningham v. MacNeal Memorial Hospital the Supreme Court of Illinois held that it may be possible to recover under a theory of strict liability in tort and the Supreme Court of Pennsylvania in Hoffman v. Misericordia Hospital of Philadelphia held that a nonsale common law warranty is a valid theory of recovery.

Hepatitis is an inflammation of the liver. Homologous serum hepatitis is an inflammation of the liver due to a virus. This virus can enter the body only through the blood; a hospital patient acquires the disease primarily through transfusion. The incubation period of the disease is extremely long varying from fifty to one hundred-eighty days. A carrier shows no visible signs of the disease during this incubation period and can transmit the disease to others by becoming a blood donor. It is claimed that there is no means of detecting the virus in a donor, although this has been a topic of dispute in recent years. Various techniques have been developed to treat plasma in order to destroy any virus present.

With the advent of disposable needles and stricter sterilization practices the risk of contracting homologous serum hepatitis has been reduced. The most reliable studies put the current attack rate at two percent of those patients transfused. The resultant illness may be mild, moderate or

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1 For our purposes we can consider blood to be composed of liquid and cells. Plasma is the liquid portion of the blood. It is the blood without blood cells. Plasma should be distinguished from serum which is plasma without the clotting material. DORLAND'S MEDICAL DICTIONARY 1168 (24th ed. 1965).

2 Homologous serum hepatitis is also called homologous serum jaundice or serum hepatitis. Homologous serum hepatitis should be distinguished from infectious hepatitis which is not transmitted through the blood.

3 There are other injuries possible from blood transfusions. The most common of which is incompatible blood due to mismatched blood groups. Diseases other than homologous serum hepatitis which are transmitted by transfusion are malaria and syphilis. See generally 42 Minn. L.R. 640-661 (1938).

4 Allen, Enerson, Barron and Sykes, Pooled Plasma with Little or No Risk of Homologous Serum Jaundice, 154 A.M.A.J. 103 (1954), found that plasma stored at higher than room temperature (32°C) for six months kills any serum hepatitis virus present.
severe. Victims of this disease require six to eight weeks of hospitalization; the disease may be fatal. The setting in which litigation in this area arises has a common factual pattern. The patient is advised by his doctor that a blood transfusion is necessary. The patient is usually not in a position to question the doctor's advice or to select a donor. Blood is then prescribed by the doctor but billed separately to the patient. The hospital has received the blood from a blood bank which has in turn received the blood from voluntary or paid donors who were not thoroughly examined before the blood was given. The patient then receives the blood contaminated by the virus. The disease usually manifests itself well after the patient has left the hospital. The patient is understandably angry. He entered the hospital to get well, not contract additional diseases.

Victims of serum hepatitis have attempted recovery under three theories: negligence, breach of warranty, and strict liability in tort.

II. THEORIES OF RECOVERY

A. Negligence

Two early cases involving negligence arose from the distribution of dried pooled plasma that was used during World War II. At the end of the War the Red Cross gave the surplus stock to the states for distribution to hospitals and blood banks. At that time the incidence of homologous serum hepatitis from pooled plasma was much higher than from whole blood.

In Parker v. State, the first reported homologous serum hepatitis case, a patient being treated for shock was given dried pooled plasma distributed by the state to the hospital. Although he recovered from his injury, he died two months later from hepatitis. His widow brought an action against the state claiming that the state should have warned the doctor of the danger of hepatitis. The court affirmed a dismissal of the complaint.

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8 2 GRAY, supra note 5, at §38.35 and §38.36.
9 Fatalities run about 2% of those contracting the disease. Id. §38.37.
11 Dried pooled plasma is a substitute for whole blood. Whole blood of 10-50 donor's is converted into dried powder and "pooled" into one container. When water is added the plasma may be transfused to the patient. Pooled plasma has advantages over whole blood in that it is more stable and there is no need to type the recipient (patient). Thus it is extremely useful in an emergency situation. However, if the blood of only one of the 10-50 donor's is infected, it will infect the whole container therefore the risks of hepatitis are much greater. In 1952 the risk of hepatitis from pooled plasma was 12% as compared to 2% for whole blood. See generally A Report of the Committee on Medicolegal Problems of the American Medical Ass'n., Medicolegal Aspects of Blood Transfusion, 151 A.M.A.J. 1435 (1952). Plasma storage techniques have reversed the situation so that today plasma may be made safer than whole blood. Supra, note 7.
on the ground that the state had a right to assume that a doctor using the plasma would know of the danger and use it only in limited situations such as emergencies. Although the doctor was not a party to the action the court indicated that he would not have been found negligent since there had been a need for a fast transfusion and the time required to wait for the proper preparation of whole blood had been outweighed by the need for immediate treatment for shock.

_Hidy v. State_ was a similar case, but in it the decedent had been in the hospital for many hours prior to an operation and there was time to obtain the safer whole blood. The court again held that the State was not liable. It noted that the causal link between the state and the patient was interrupted by the doctor. It was therefore the doctor who really directed the plasma to the patient and not the state. The court then indicated that there may have been negligence on the part of the doctor in using plasma instead of the then safer whole blood, especially in the absence of an emergency.

Negligence per se as a basis of liability was attempted in _Merck and Company v. Kidd._ There the plaintiff argued that supplying blood containing homologous serum hepatitis virus violated the Tennessee Food, Drug and Cosmetic Act. The statute stated that a drug is adulterated if it contains any "filthy" substance and that such adulterated drugs are prohibited. The plaintiff contended that the virus in the plasma was "filthy," thereby making the plasma adulterated. The court, speaking through Judge Potter Stewart, held that since the presence of the virus could not be detected or destroyed, the virus was not "filthy" within the "intendment" of the statute. The dissenting judges argued that in other cases food contamination by bacilli was considered "filthy" for purposes of the Tennessee Food, Drug and Cosmetic Act. They reasoned that the hepatitis virus is a disease producing substance like food bacilli and should be treated the same. The dissenting judges said that detectability of the virus was irrelevant to the question of whether the substance was "filthy." The negligence theory cases after _Merck_ involved suits against nonprofit hospitals and blood banks. Some of these suits encountered the defense of charitable immunity.

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14. 242 F.2d 592 (6th Cir. 1957).
16. This was a misassumption on the part of Judge Stewart since storing plasma at 32°C for six months will destroy the virus. _Supra_ note 7.
17. 242 F.2d 592 (6th Cir. 1957).
19. _Gile v. Kennewick Public Hospital District_, 48 Wash. 2d 774, 296 P.2d 662 (1956), although involving mismatched and not virus contaminated blood, presents many of the same is-
Another negligence issue centered on the duty of the hospital to warn the patient of the danger of hepatitis. In *Fischer v. Wilmington General Hospital* the plaintiff contended that since the risk of hepatitis was known to the hospital there was a duty to warn the patient. Chancellor Seitz in dismissing the complaint held that, since the risk of hepatitis was low compared to the risk of excessive blood loss and as there was a general practice in the medical profession not to advise patients of the risk of hepatitis, the hospital had no duty to warn the patient and therefore had not been negligent.

The later cases, consistent with these earlier examples, have denied any recovery for negligence. The best a plaintiff has accomplished under a theory of negligence is to avoid a summary judgment on appeal and allow the case to be remanded. Usually this is a Pyrrhic victory since the judge, although complying with the procedural necessity to remand due to an insufficient record, usually expresses doubt as to any negligence on the part of the hospital. Thus negligence has been extremely difficult to prove in serum hepatitis cases. There is no legal duty to warn of the danger and since there has been no way until recently to detect the virus in the donor's blood, if the hospital has used due care in storing and processing the blood it has not been held liable. However, if the hospital has not used proper preventive techniques such as the careful screening of donors, it may be liable for lack of due care. There is no reported litigation on this issue. Having no success with the negligence theory the plaintiffs' bar proceeded to breach of warranty theories, where negligence need not be proven. But this too presented some problems.

B. Breach of Warranty

Various types of warranty theories have been attempted. These include the implied warranties of merchantability and fitness for purpose, express warranty and, most recently, nonsale common law implied warranties. Before the adoption of the Uniform Commercial Code, most suits for breach of warranty were pursued under section 15 of the Uniform Sales Act.

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20 51 Del. 554, 149 A.2d 749 (1959).
22 Id.
23 Since there is no completely reliable test for the presence of virus in the donor's blood prevention may be accomplished by screening donor's primarily in the form of obtaining a medical history. This is unreliable since the donor may lie, as in the case of an addict, or may not be aware that he may be a carrier of the virus because he has forgotten he has had a previous transfusion. *Supra* note 5. But there is still a basis for liability since some hospitals are more careful in screening donor's and therefore have a lower incidence of hepatitis.
24 UNIFORM SALES ACT § 15 (1906).
This section corresponds to sections 2-314 and 2-315 of the Uniform Commercial Code.\textsuperscript{25}

The landmark case in this area is \textit{Perlmutter v. Beth David Hospital}.\textsuperscript{28} The plaintiff had attempted to frame a warranty cause of action by contending that there was the requisite sale of blood since she was separately billed for sixty dollars. She further contended that the defendant knew the purpose for which the blood was to be used and that she relied on the hospital's skill and judgment in selecting the blood. Since the blood contained a disease producing virus it was not "fit," thereby giving rise to a breach of the implied warranties of merchantability and fitness for particular purpose. The case was decided solely on whether supplying the blood for transfusion was a sale. The New York Court of Appeals in a four to three decision enunciated the rule which was to influence courts in many jurisdictions. The court held that implied warranties applied only to sales transactions. The supplying of blood, although separately billed to the patient, was not a sale but part of the service contract between the patient and the hospital; therefore no implied warranties were made. In reaching this decision the court employed a doctrine described as the "predominant feature" or "essence" test used in pre-code food cases. Under this test the court looked at the overall transaction between the hospital and the patient and decided whether that transaction was predominantly a contract for services or a sale. It did not consider the transaction as divisible, part into services, part into sale. The court summarized its decision as follows:

The supplying of blood by the hospital was entirely subordinate to its paramount function of furnishing trained personnel and specialized facilities in an endeavor to restore plaintiff's health. It was not for blood—

\textsuperscript{25} The pertinent parts of these sections reads as follows:

\textbf{Section 2-314. Implied Warranty: Merchantability; Usage of Trade.}

(1) Unless excluded or modified (Section 2-316), a warranty that the goods shall be merchantable is implied in a contract for their sale if the seller is a merchant with respect to goods of that kind. Under this section the serving for value of food or drink to be consumed either on the premises or elsewhere is a sale.

(2) Goods to be merchantable must be at least such as

(a) pass without objection in the trade under the contract description; and

(c) are fit for the ordinary purposes for which such goods are used. . . .

The only difference between this section and section 15 of the UNIFORM SALES ACT is the inclusion here of the sentence clarifying that serving food for value is a sale and not a service. Therefore it is within this section. But this change is highly significant because it expresses the liberalized policy of remedies under the \textit{UNIFORM COMMERCIAL CODE}.\textsuperscript{30}

\textbf{Section 2-315. Implied Warranty: Fitness for Particular Purpose.}

Where the seller at the time of the contracting has reason to know any particular purpose for which the goods are required and that the buyer is relying on the seller's skill or judgment to select or furnish suitable goods, there is unless excluded or modified under the next section an implied warranty that the goods shall be fit for such purpose.

\textsuperscript{28} 308 N.Y. 100, 123 N.E.2d 792 (1954).
or iodine or bandages—for which plaintiff bargained, but the where-
withal of the hospital staff and the availability of hospital facilities to pro-
vide whatever medical treatment was considered advisable. The conclu-
sion is evident that the furnishing of blood was only an incidental and
very secondary adjunct to the services performed by the hospital and, there-
fore, was not within the provisions of the Sales Act.\footnote{Id. at 106, N.E.2d at 795.}

New York courts had previously held that supplying food in a res-
taurant was a sale and not a service. The \textit{Perlmutter} majority distin-
guished these food cases from the present case by reasoning that one goes
to restaurants to buy food, not services, but one goes to a hospital for the
service of a cure, not for blood or bandages. The court emphasized the
fact that hepatitis contaminated blood could not be detected; therefore,
there was no negligence involved in this injury. It refused to hold the
hospital liable by warranty under such circumstances, stating that to do
so would make hospitals virtual insurers.

The dissent, written by Judge Froessel, retorted that the plaintiff was not
suing for negligent services but for bad blood, for which she had been
separately billed. The dissent asserted that the plaintiff should be given a
chance to prove the claim of a sale, since by the definition of “sale” under
the Uniform Sales Act this was arguably a sale.\footnote{UNIFORM SALES ACT § 1(2):
A sale of goods is an agreement whereby the seller transfers the property in goods
to the buyer for a consideration called a price.

\textit{Id.} at 106, N.E.2d at 795.} Judge Froessel saw no
distinction between the food cases and the present case.

The majority in \textit{Perlmutter}, by emphasizing the service aspect instead
of the separate billing sale aspect of this case, had made a decision which
protected hospitals from liability. As the close division of the court indi-
cates, it could as easily have emphasized the sale aspect, thereby making a
decision to protect the patient. Having a major policy decision turn on the
sale-service distinction has been extensively criticized.\footnote{But the distinction,

Similar reasoning is present in mismatched blood cases: \textit{Diblee v. Dr. W. H. Groves Latter Day Saints Hospital, 12 Utah 2d 241, 364 P.2d 1085 (1961)}; \textit{Gile v. Kennewick Public Hospital

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states stating that the supplying of blood by a hospital or blood bank was not a sale for purposes of warranty protection. In the 1960's there was a gradual erosion of the Perlmutter rule. Joining academic criticism, some courts began questioning the rule.

Whatever logic the Perlmutter rule had concerning hospitals such logic is less compelling where blood banks, particularly commercial blood banks, are being sued. Blood banks supply no predominate service but rather only blood while charging the patient. This is more arguably a sale. So, some jurisdictions distinguished hospitals from blood banks while other jurisdictions followed the Perlmutter rule.

Some courts limited the Perlmutter rule to implied warranties and held that a complaint against a hospital or blood bank was sufficient if it stated a cause of action in express warranty.

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Most of these states incorporated provisions protecting hospitals from liability as an amendment to the warranty section in the state UNIFORM COMMERCIAL CODE. Ohio incorporated a similar provision in the Uniform Anatomical Gift Act which reads as follows:

§ 2108.11 Transaction involving human tissue not a sale. The procuring, furnishing, donating, processing, distributing, or using human whole blood, plasma, blood products, blood derivatives, and products, cornes, bones, organs, or other human tissue except hair, for the purpose of injecting, transfusing, or transplanting any of them in the human body, is declared for all purposes to be the rendition of a service by every person, firm, or corporation participating therein, whether or not any remuneration is paid therefor, is declared not to be a sale of any such items, and no warranties of any kind or description are applicable thereto.

It should be noted that recovery under a theory of strict liability is theoretically not prohibited by these statutes.

32 Gottsdanker v. Cutter Laboratories, 182 Cal. App. 2d 602, 6 Cal. Rptr. 320 (App. Ct. 1966) involved a suit on implied warranty for injury due to polio vaccine. The defendant manufacturer contended that since the California legislature had ruled that the supplying blood into the body was a service then supply of the drug by analogy (since the drug was partly obtained from horse blood) was also a service. The court rejected this contention and questioned the logic underlying Perlmutter.

33 Hoder v. Sayet, 196 So. 2d 205 (Fla. Ct. App. 1967); Russell v. Community Blood Bank, Inc., 185 So. 2d 749 (Fla. Ct. App. 1966) modified, 196 So. 2d 115 (Fla. 1967). In the same state supplying of blood by a hospital was not a sale. White v. Sarasota County Public Hospital Board 206 So. 2d 19 (Fla. Ct. App. 1968). See also Carter v. Interfaith Hospital of Queens, 60 Misc. 2d 733, 304 N.Y.S. 2d 97 (1969) where even in New York the possibility of distinguishing blood banks from hospitals in the sale-service distinction is entertained. This is reminiscent of the distinctions developed in the pre-Code food cases.


The sales-service distinction of Perlmutter was further eroded in the 1960's by the acceptance of the Uniform Commercial Code. The specific inclusion of food as a sale for warranty purposes demonstrated an area in which some courts had considered as a nonwarranty service. The liberal administration of remedies to aggrieved parties as a stated policy of the Uniform Commercial Code also influenced the courts considerably. Moreover, the general legal trend of expanding causes of action further eroded the Perlmutter decision. As the Code gained acceptance, protection was extended to nonsale service transactions in areas other than blood cases.

Finally, in Jackson v. Muhlenberg Hospital a New Jersey court rejected the Perlmutter rule holding that transfusion of whole blood for a charge was not a sale.

Then in 1970, the Supreme Court of Pennsylvania considered the problem in Hoffman v. Misericordia Hospital of Philadelphia. It is noteworthy that in 1953 Pennsylvania became the first state to enact the Uniform Commercial Code. Thus Pennsylvania has had the longest experience with the mechanics and philosophy of the Code. The court noted that the Perlmutter case hadn't considered the possibility of warranties in nonsale cases thereby placing the emphasis on whether or not the elements of a sale were present. Judge Cagen speaking for the court noted that Pennsylvania had nonsale warranties before the enactment of the Uniform Commercial Code and, citing Comment 2 § 2-313 of the Code, said that the enactment of the Code was not intended to impede progress of implied warranties in nonsale situations. The court, in overruling the defendant's demurrer stated:

213 N.Y.S.2d 6, 174 N.E. 2d 923 (N.Y. Sup. Ct. 1961) may have been overruled sub silento in Payton v. Brooklyn Hospital 19 N.Y. 2d 610, 234 N.E. 2d 891 (1967).

38 Supra note 25.
37 UNIFORM COMMERCIAL CODE § 1-106 and § 2-313, Comment 2.
41 The possibility of liability under a theory of non-sale warranty in serum hepatitis cases was suggested as early as 1955 in 69 HARV. L. REV. 305 (1955).
42 UNIFORM COMMERCIAL CODE § 2-313 Comment 2:

Although this section is limited in its scope and direct purpose to warranties made by the seller to the buyer as part of a contract for sale, the warranty sections of this Article are not designed in any way to disturb those lines of case law growth which have recognized that warranties need not be confined either to sales contracts or to the direct parties to such a contract. They may arise in other appropriate circumstances such as in the case of bailments for hire, whether such bailment is itself the main contract or is merely a supplying of containers under a contract for the sale of their contents. The provisions of Section 2-318 on the third party beneficiaries expressly recognize this case law development within one particular area. Beyond that, the matter is left to the case law with the intention that the policies of this Act may offer useful guidance in dealing with further cases as they may arise.
In view of our case law implying warranties in nonsales transactions, it cannot be said with certainty that no recovery is permissible upon the claim here made, even if it should ultimately be determined that the transfer of blood from a hospital for transfusion into a patient is a service. ... 43

The court only decided that recovery did not hinge on whether the transfer of blood was a sale or a service. It carefully limited its decision by making explicit the issues not decided by the court: (1) the extent which implied warranties in non-sale situations should be given effect, (2) the duty of the hospital to warn the patient, (3) whether charitable immunity should extend to the contractual warranties involved here, 44 (4) any defenses for breach of warranty such as assumption of risk or a break in the chain of proximate cause. By so limiting its decision the court refused to make the policy decision of Perlmutter to protect hospitals until it had further facts.

Contemporaneous with the Hoffman case, lawyers were constructing other theories to challenge the Perlmutter rule, one of which was strict liability.

C. Strict Liability 45

Strict liability in tort incorporates the concept of strict liability embodied in warranty theories without the accretion of defenses which have attached to warranties. 46

The most quoted statement of strict liability in tort is found in the Restatement (Second) of Torts § 402 A which reads as follows:

(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if
   (a) the seller is engaged in the business of selling such a product, and
   (b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.
(2) The rule stated in Subsection (1) applies although
   (a) the seller has exercised all possible care in the preparation and sale of his product, and
   (b) the user or consumer has not bought the product from or entered into any contractual relation with the seller. 47

The essential element needed to be shown under this theory is that the product was "in a defective condition unreasonably dangerous." The underlying policy of strict liability in tort is risk distribution. Therefore,

43 439 Pa. at ——, 267 A.2d at 870.
46 RESTATEMENT OF TORTS (SECOND) § 402 A, comment m (1966).
47 Id.
liability is placed on the party that can best anticipate and bear the loss. The party bearing the risk can insure and spread the loss among the users of the product by raising his prices.

Under a theory of strict liability in tort, it was argued that hospital or blood banks are better candidates to spread the loss through high prices for blood. But, courts initially denied recovery on this basis. In Balkowitsch v. Minneapolis War Memorial Blood Bank, Inc., the court simply refused to consider the concept of strict liability but decided the protection of hospitals from liability was of higher policy consideration:

We find it difficult to give literal application of principles of law designed to impose strict accountability in commercial transactions to a voluntary and charitable activity which serves a humane and public health purpose.40

The inability to detect the virus is also of concern to some courts. In Russell v. Community Blood Bank, Inc., the lower court having found a warranty cause of action held the defendant liable for injuries capable of being detected. But the Supreme Court of Florida citing § 402A said this was contrary to the court’s decision in Green v. American Tobacco Co.51 which held that a manufacturer was strictly liable for breach of warranty even if the danger was not detectable.

Recovery under theory of strict liability in tort was denied in Jackson v. Muhlenberg Hospital.52 The court held that the strict liability theory in the blood cases was defeated by the unavoidably unsafe exception of § 402A as enunciated in comment (k):

There are some products which, in the present state of human knowledge, are quite incapable of being made safe for their intended or ordinary use. These are especially common in the field of drugs.53

Rabies vaccine is cited as one example of an unavoidably unsafe product. The reactions to rabies vaccine are dangerous, but use of the vaccine is justified in view of the alternatives.

The defenses of nondetectibility and the comment (k) exception, along with the policy considerations were recently considered in Cunningham v. MacNeil Memorial Hospital.54 Here, the court noted that the concept of strict liability in tort had been accepted in Illinois.55 After the plaintiff attempted to state a cause of action for strict liability by alleging that blood received was defective and in an unreasonably dangerous condition,

48 270 Minn. 151, 132 N.W.2d 805 (1965).
49 Id. at 159, 132 N.W.2d at 811.
50 185 So. 2d 749 (Fla. Ct. App. 1966).
51 154 So. 2d 169 (Fla. 1963).
54 —— Ill. ——, 266 N.E.2d 897 (1970).
the hospital raised as a preliminary defense that the blood was not a product as required under Section 402A since it was not processed. However, the court cited comment (e) of the Restatement and stated that the blood need not be processed to be a product.\footnote{\textsuperscript{56}}

The defendant then attempted to use the \textit{Perlmutter} rule by arguing that if this transfer of blood was a service then the defendant was not "engaged in the business of selling blood" as required by Section 402A. However, the court rejected the \textit{Perlmutter} rule as "simply unrealistic." In doing so, \textit{Russell} and the dissenting opinion of \textit{Perlmutter} were cited with approval.

On the detectibility issue the court ruled against the defendant citing § 402A (2) (a) \textit{supra} noting:

To allow a defense to strict liability on the ground that there is no way, either practical or theoretical, for a defendant to ascertain the existence of impurities in his product would be to emasculate the doctrine and in a very real sense would signal a return to a negligence theory.\footnote{\textsuperscript{57}}

The court thereby emphasized the no fault concept of strict liability noting that the lack of detectibility had no effect in warranty cases and would not be accepted as a defense in the strict liability area.

Considering the comment (k) exception concerning unavoidably unsafe products, the court stated that the exception only applied to pure products which, even if properly prepared, involved substantial risk of injury to the user. This exception does not apply to the contaminated blood situation in which the product is alleged to be impure. In other words, in the case of blood there is the requisite "defective" virus, but in the case of a vaccine such as rabies no such defect is present. Therefore, the rabies vaccine is not within the scope of § 402A.

Responding to the policy argument for the protection of hospitals the court noted:

Defendant implicitly raises the \textit{ad terrorem} argument that allowing a strict tort liability theory to obtain in this case will "open the flood gates" to disastrous litigation which will ultimately thwart the fulfillment of the hospitals worthy mission by drainage of their funds for purposes other than those intended. Our answer to this contention is that . . . we do not believe in this present day and age, when the operation of eleemosynary hospitals constitutes one of the biggest businesses in this country, that hospital immunity can be justified on the protection of the funds theory. The concept of strict liability in tort logically, and we think, reasonably dictates that an entity which distributes a defective product for human conception,

\footnote{\textsuperscript{56} Comment \textit{e} reads as follows:} 
\begin{quote}
"Normally the rule stated in this Section will be applied to articles which already have undergone some processing. . . . The rule is not, however, so limited, and the supplier of poisonous mushrooms which are neither cooked, canned, packaged, nor otherwise treated is subject to the liability here stated."
\end{quote}

\footnote{\textsuperscript{57} — III. ——, 266 N.E.2d 902 (1970).}
whether for profit or not, should legally bear the consequences of injury caused thereby, rather than allowing such loss to fall upon the individual consumer who is entirely without fault.\textsuperscript{58}

Thereafter, the court held the complaint sufficient and remanded the case to proceed to trial.

The court in \textit{Cunningham} made a policy decision as did the court in \textit{Perlmutter}. The \textit{Perlmutter} court decided to protect the hospital from liability, whereas the \textit{Cunningham} court decided to protect the patient.

III. THE POLICY CONSIDERATIONS

From the foregoing discussion, it is obvious that the sales-service distinction of \textit{Perlmutter} is an insufficient basis for the blood case decisions. The question of liability involves the weighing of other considerations. These considerations include the effect of liability on the price of blood, the possibility of new methods of detection or prevention of serum hepatitis and the possible alternatives to legal liability such as insurance.

Assuming, for the moment, that the presence of serum hepatitis virus in the blood is undetectible, then the case for holding hospitals and others liable on theories of warranty and strict liability in tort is questionable. The reason is not based entirely on the fact of undetectibility. Undetectibility has not been a bar to imposing liability in warranties or strict liability in tort in other areas.\textsuperscript{59} However, since the hepatitis virus can not be detected, the two percent attack rate of the disease cannot be reduced. The overall effect of this may be a substantial rise in the price of blood. The purpose of strict liability is to distribute the cost to the users of the product so that each bears a small burden of the cost of liability. The question is whether the two percent attack rate of serum hepatitis is too high to effectuate this purpose. Some figures will demonstrate this point. Approximately 30,000 patients are bedridden by hepatitis every year. These patients require up to eight weeks of hospitalization.\textsuperscript{60} If hospitals are held strictly liable, then each of these patients could expect considerable recoveries. Recoveries might conservatively average $5,000 in out of pocket expenses (hospital bills, lost wages, etc.) alone. This means the hospital must insure against one hundred and fifty million dollars (30,000 patients x $5,000 each) of known risks every year. Insurance companies would charge hospitals more than one hundred and fifty million dollars in premiums in order to make a profit. The effect on the price of blood would be considerable. Spreading this cost over the one and a half million transfusions per year, the price of blood would increase by approximately

\textsuperscript{58} \textit{Id.} at \textit{---}, 266 N.E.2d at 904.


\textsuperscript{60} \textit{Supra} note 9.
eighty dollars per unit. If the cost of hepatitis insurance is paid solely out of the price of blood, the price of blood may be doubled. Furthermore, if the price of blood became exorbitant, it may affect the decisions of the attending physician. Although, theoretically, price should not affect a physician’s judgment, as a practical matter it does. Blood, formerly given to speed recovery, may be withheld if the physician feels the price of blood may have a crushing economic impact on the patient.

Although the above figures are not exact, they are instructive to show that courts should carefully consider the economic impact of the imposition of strict liability. It is noteworthy that in the Cunningham decision although the court discussed concepts of charitable immunity at length, it does not mention the economic impact of strict liability on the price of blood.

Further arguments against strict liability can be made from examining the policy of § 402A of the Restatement (Second) of Torts. Is blood infected by hepatitis a “product in a defective condition unreasonably dangerous” to the patient? In almost all cases blood is administered to save lives; therefore, withholding blood may have serious consequences, including death. The administration of infected blood may still save a life even though it causes subsequent hospitalization for hepatitis. Under these circumstances administration of blood in such a defective condition is not unreasonably dangerous.

The comment (k) exception concerning unavoidably unsafe products would also seem to support this position. The Cunningham court distinguished this comment by saying it applied only to pure products and not impure blood. But the court did not take note of the following language in comment (k):

It is also true in particular of many new or experimental drugs as to which, because of the lack of time or opportunity for sufficient medical experience, there can be no assurance of safety, or perhaps even purity of ingredients, but such experience as there is justifies the marketing and use of the drug notwithstanding a medically recognizable risk.

This language indicates that the comment (k) exception was to include not only unsafe pure drugs such as rabies vaccine, but also unsafe and impure drugs such as virus infected blood. So the policy of comment (k) would seem to include blood even though the Cunningham court chose to distinguish it.

Strict liability in tort as described in § 402A is a flexible and use-

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61 14 Am. Jur., Proof of Facts, 149-151 (1961). This is assuming one pint of blood per transfusion. Even assuming one transfusion contains three pints of blood the effect on the price of blood would still be considerable. Empirical proof in this area is difficult to obtain. Some figures place the incidence of serum hepatitis at an annual rate of only 8,000 patients. In this case the rise in price would be ten dollars. This is still more of an economic impact than the few cents usually contemplated by the imposition of strict liability.

62 Restatement of Torts (Second) § 402 A, comment k (1966) (emphasis supplied).
ful legal tool. In recent years it has become an effectual and popular cause of action. However, the concept of strict liability in tort needs further consideration and refinements particularly in light of the economic impact of decisions imposing such liability. The Cunningham approach to the language of § 402A would seem to be too mechanical and perhaps no better than the sales-service approach of Perlmutter.

Thus in the case of undetectible impurities in beneficial drugs the weight of the evidence is against the imposition of strict liability if: (1) the impurity is completely undetectible, (2) the presence of the impurity is not preventible by screening donors, (3) the percentage of the occurrence is so high that the cost cannot be effectively distributed at a moderate cost.

A possible alternative to strict liability would involve hospitalization insurance. Collateral benefits such as hospitalization insurance and sick pay usually prevent victims of serum hepatitis from being economically destroyed. One may argue that recovery in many instances by serum hepatitis patients would be a windfall. Of course, American tort law has a "no collateral benefits" rule whereby the amount of collateral benefits does not mitigate the amount of recovery. But if blood becomes financially prohibitive, and the cost of strict liability is weighed against the harm to patients, then it is arguable that the "no collateral benefits" rule should be abolished, and in its stead permit recovery only in the excess of collateral benefits. If courts ultimately opt for imposing liability, then the abolition of the no collateral benefits rule could serve as a middle ground to decrease the amount of recovery and therefore decrease the resultant amount of increase in the price of blood needed to pay for hepatitis insurance.

The law is often affected by advances in medical science. These blood cases are no exceptions. Recent discoveries have raised the possibility that within the next few years the virus of serum hepatitis may be readily detectible in the blood of the donor. The National Institute of Health recently announced the first governmental licensing of a test used to screen hepatitis in the blood. The new test which is inexpensive and easily performed is twenty-five to fifty percent effective in detecting hepatitis infected blood. If this test and other methods presently being explored prove effective, the attack rate of two percent could be significantly reduced. Additional reduction in the attack rate may be obtained by new techniques in screening donors. If this were possible, the cost could then be distributed among the users of blood with only a slight increase in the cost on blood. Under such circumstances imposition of strict liability

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64 Wall St. Jour., Mar. 2, 1971 at 1, col. 1. This test indicates the presence of Australia antigen, a substance linked with serum hepatitis. If the antigen is present in the blood there is a high probability that the hepatitis virus is also present.
would be plausible. Furthermore, the imposition of liability may have a
deterrent effect in encouraging searches for further methods to reduce lia-
ability. If hospitals and others are held liable, then there may be encourage-
ment for more careful screening of donors.

Perhaps legal liability is not the answer. This area may be better
served by an insurance alternative. One suggestion would be to establish
some form of insurance whereby patients receiving blood and wishing to
insure against the risk of contracting serum hepatitis could easily do so.
But this approach would probably have to be initiated by the legislature.
Historically, legislatures have absolved hospitals from liability without at-
ttempting to deal any further with the problem.65

As new techniques are developed, serum hepatitis may eventually be
prevented. Hopefully, the development of a vaccine to immunize against
the disease will render these cases moot, but the considerations involved
such as warranties, strict liability and hospitals will continue to be relevant.

\textit{Alan Radnor}

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65 ARIZ. REV. STAT. ANN. § 36-1151 (West Supp. 1971); CAL. HEALTH AND SAFETY
CODE § 1623 (West 1955); DEL. CODE ANN. tit. 5A § 2-316(5) (Spec. U.C.C. Pamphlet
1971); MASS. GEN. LAWS ANN. ch. 106, § 2-316(5) (Michie Supp. 1970); MICH. COMP.
LAWS ANN. § 691-1511 (West Supp. 1971); MISS. CODE ANN. § 7129-71 (Harrison Supp.
1968); NEB. REV. STAT. § 71-4001 (R.S. Supp. 1969); N.M. STAT. ANN. § 12-12-5 (Smith
Supp. 1971); N.D. CENT. CODE § 41-20-33(3) (d) (Smith Supp. 1971); OHIO REV. CODE
ANN. § 2108.11 (Page Supp. 1971); OKLA. STAT. ANN. tit. 63 § 2151 (West Supp. 1971);
S.C. CODE ANN. § 32-559 (Michie Supp. 1970); S.D. CODE § 57-4-33.1 (Smith Supp. 1971);